

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number
WO 02/01451 A1

(51) International Patent Classification⁷: **G06F 17/60**

(21) International Application Number: PCT/US00/31346

(22) International Filing Date:
16 November 2000 (16.11.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/213,519 23 June 2000 (23.06.2000) US
60/215,878 30 June 2000 (30.06.2000) US
09/702,794 1 November 2000 (01.11.2000) US

(71) Applicant (for all designated States except US): **ZEBRA-PASS, INC.** [US/US]; Suite 200, 1220 Connecticut Avenue, NW, Washington, DC 20038 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CUNNINGHAM, Donald, A.** [US/US]; 7945 Turncrest Drive, Potomac, MD 20854 (US). **KLEAR, Jordan, C.** [US/US]; 7111

Woodmont Avenue, Apt. 404, Bethesda, MD 20815 (US). **STEREN, Marc, N.** [US/US]; 7620 Old Georgetown Road, Apt. 815, Bethesda, MD 20814 (US).

(74) Agents: **DONNER, Irah, H.** et al.; Hale and Dorr LLP, 1455 Pennsylvania Avenue, N.W., Washington, DC 20004 (US).

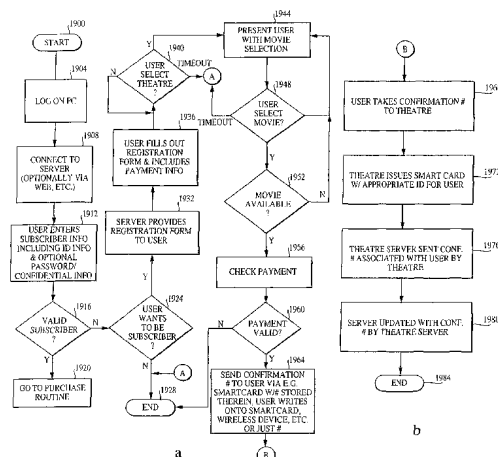
(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: INITIALIZING/ACTIVATING ACCOUNTS UTILIZABLE FOR PURCHASING/PROVISIONING ITEMS/SERVICES OVER DATA COMMUNICATIONS NETWORKS



(57) Abstract: A technique for initializing an account for use in purchasing and provisioning admittance to entertainment events to an event customer utilizes a data communication network (1908). These entertainment events include any one or more of sporting events, movies, theatre events, open-seating events, reserved-seating events, and/or any combination thereof (1940). The technique includes receiving a communication from the customer at a server via the data communication network (1908) requesting activation of the account. In response to the communication, the account is activated to allow storage of information regarding purchases made by the customer. In addition, an identifier is associated with the customer. Then, an identification device is distributed to the customer (1972). This identification device has the identifier stored therein and is utilizable for accessing the account at a point of sale for provisioning of the purchases (Figures 19a and 19b).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

**INITIALIZING/ACTIVATING ACCOUNTS UTILIZABLE FOR
PURCHASING/PROVISIONING ITEMS/SERVICES OVER DATA
COMMUNICATIONS NETWORKS**

5

RELATED APPLICATIONS

This application claims priority from U.S. Patent Application No. 09/702,794, filed November 1, 2000, which claims priority from U.S. Provisional Application 60/213,519, filed June 23, 2000, to Klear et al., and U.S. Provisional Application 60/215,878, filed June 30, 2000, to Klear et al., all of which are incorporated herein by reference.

10

TECHNICAL FIELD

The present invention relates generally to an initialization process that administers and/or contributes to purchasing and/or provisioning of items or services online, and more particularly, to a system, method, and computer readable medium storing computer-executable instructions for initializing an account and/or processes for use in purchasing items or services including event tickets, concessions, and/or merchandise over a data communication network, and optionally provisioning these purchases at a point of sale location. Provisioning, as defined herein, includes in whole or in part, the process of effectuating and/or facilitating the processing of a transaction, including, for example, the sale and/or transfer of tickets for movies, theatre, shows, sporting events, cultural events, and the like.

15

20

BACKGROUND ART

25

In 1998, online movie ticket purchases accounted for a mere 0.05% of the 1.5 billion movie tickets sold. However, listings of show times for these movies are accessed over the Internet at astronomical levels. To say, then, that the online movie ticket industry remains largely untapped would be somewhat of an understatement.

30

To be sure, the number of movie tickets purchased online and other e-commerce transactions are expected to increase at a phenomenal pace in the near future. Movie tickets today are an enormous industry. In 1997, \$6.36 billion dollars were spent on movie admissions. This, coupled with the expected continued increase in the number of e-commerce transactions indicates that the future trend in the sales of movie tickets will be online. According to a recent Wall Street Journal article, the online

ticketing industry can best be characterized by the online ticketing powerhouse, Ticketmaster, which does well over \$10 million a month, ticketing everything from concerts to sporting events. See, FIGS. 1 and 2. International Data Corporation estimated the market at \$2.6 billion in 1996 and expects it to grow almost a hundredfold to \$220 billion in 2001. Forrester Research also expects Internet-based e-commerce to increase from 12 percent of a typical company's revenue to 42 percent. According to the Internet's largest demographic survey, conducted by the Georgia Institute of Technology in late 1997, of the 10,000 respondents, 47 percent had four-year college degrees or better, and household incomes average more than \$53,000 a year. A joint study from International Data Corp. and Relevant Knowledge Inc. indicates that by 2002, half of the 102 million people in the U.S. who use the Internet at home will be shoppers.

The trend in box office revenues over recent years is also encouraging. The number of screens was up 7.1% in 1996, 6.8% in 1997, and an estimated 8% in 1998. Goldman Sachs believes that the industry could have over 40,000 screens by the end of 2002, a 6.5% CAGR increase from the 30,825 screens at year-end 1997 reported by the Motion Picture Association of America. Clearly, then, a vast body of evidence indicates that online ticket sales, not only to movies but also to other events such as sporting events, will only increase in the foreseeable future. Yet with all of this evidence suggesting that the online ticketing industry is more than ready to explode with development, no effective means exist for provisioning items purchased online at a point of sale location particularly designed for entertainment events. Nor do means exist for initiating an account utilizable with such a process.

Movie and event advertising via a communications network, like ticket sales, is another area ready for development. In 1997, the average movie advertising costs alone, per feature, was \$19.244 million dollars. The National Association of Theatre Owners, in 1997, conducted an analysis of average movie advertising costs, the results of which are shown in FIG. 3. According to Forrester Research, advertisers have committed less than 3% of their media advertising budgets to the Web. As online advertising dollars rise to over \$8 billion by 2002, movie studios will be spending a greater percentage online to promote their upcoming films. Furthermore, as demonstrated in FIGS. 4a - 4b, the use of e-mail as a vehicle for advertising campaigns looks also to be promising. However, as with the above, no means exist for effectively and efficiently presenting movie and event advertising via a data communications network either during the online purchase of event tickets or via personalized e-mail messages. Nor does a system exist for activating such a process.

Movie merchandising and theatre concessions are other key markets ready for development. Current estimates demonstrate that the movie licensing business stands at \$110 billion according to the International Licensing Industry Merchandisers' Association. Theatre concessions, on the other hand,

are currently a \$2.6 billion market. Even so, no means exist for users to make any of these merchandise or concession purchases, remotely, via a data communications network, with the purchase then being redeemable at a point of sale location. Nor does a technique exist for initializing such a system.

5 Several prior art techniques have not adequately addressed these needs. For example, U.S. Patent 6,052,629 to Leatherman et al. (Leatherman) is directed to an Internet capable browser dispenser architecture. As shown in prior art FIG. 5 (FIG. 1 of Leatherman), the system of Leatherman includes a plurality of fuel dispensers 12, each having at least two fueling positions and acting as a point of sale (POS) interface. Connected to the fuel dispensers 12 is a main service station store 16, a local server
10 18, a convenience store 20, a number of restaurants 22, and a car wash 24, as well as other remote servers 26 via the Internet. Basically, the system of Leatherman provides gas station customers with access to a server on a local network and remote sites via the Internet. With this arrangement, the gas station customers may purchase services at the POS dispensers and be subject to advertisements transmitted thereto. However, while Leatherman discusses purchasing items at a gas station, it makes
15 no disclosure of effectively provisioning entertainment and/or ticketing industry items purchased on-line. Nor does it disclose a technique for initializing or activating an account or system for facilitating these transactions.

 A number of wireless devices are similarly unable to address the needs of the prior art. For
20 example, U.S. Patent 5,618,045 to Kagan et al. (Kagen) relates to an interactive game system. As depicted in prior art FIG. 6 (FIG. 1 of Kagen), the interactive game system 610 of Kagen includes three playing devices 612, 614, and 616, which communicate via a wireless local area network. Communication is effected utilizing short-range radio, infrared, or ultra-sonic signals. As shown in prior art FIG. 7 (FIG. 2 of Kagen), each playing device includes a processor 718, an interface 720, a
25 transmitter 722, a receiver 724 and a display 726. Using these components, a player's actions are transmitted to and received by another player's playing device.

 U.S. Patent 5,636,920 to Shur et al. (Shur) relates to a sports team organizer. In prior art FIG. 8 (FIG. 1 of Shur), a portable computing device for organizing a sports team includes an input device
30 812, a processor 814, a memory 816, a number of stored programs 818, and an output device 820. With these elements, the organizing system allows a team roster, a starting lineup, and a number of drills to be generated.

 U.S. Patent 5,647,795 to Stanton (Stanton) relates to portable computerized pari-mutuel sports
35 entertainment system. In prior art FIG. 9 (FIG. 1 of Stanton), the system includes a computer 911 and conductor 916, a video cassette recorder 912 with video tape 917, a television set 913, keypads 914, and

printers 915. The computer 911 operates as a main computing server, and includes a motherboard 920, a memory card 921, and a number of graphics and other serial cards 922, 923, and 924. With this system, bets are entered from remote locations with keypads 914 and stored in computer 911. After a race, winnings are collected at the cashiers' windows (keypads 914).

5

The above cited patents are relevant from the perspective that wireless devices are gaining more popularity in today's society. However, none of these devices effectively provisions transactions or purchases in the context of the entertainment and/or ticketing industry. Nor do any of the above provide a technique for initializing or activating an account or system for facilitating these transactions.

10

Similarly, U.S. Patent 5,794,207 to Walker et al. (Walker) relates to a method and apparatus for a cryptographically assisted commercial network system designed to facilitate buyer-driven conditional purchase offers. In prior art FIG. 10 (FIG. 1 of Walker), the system includes seller interfaces 300, central controller 200, and buyer node 400. A number of modems 350 and 450 facilitate connection to central controller 200. Using these components, a buyer communicates a binding purchase offer to a number of sellers. In response, the sellers have the option to accept a purchase offer and thus bind the corresponding buyer to a contract. Nevertheless, Walker makes no mention of, for example, allowing redemption of the purchases at a point of sale location upon identification or verification of the purchaser or of the purchase. Nor does Walker provide a technique for initializing or activating an account or system for facilitating these transactions.

15

20

While the above discussion illustrates the growing use of wireless devices, none of the above mentioned prior art references describes, for example, adequate and effective processes for activating and/or initializing the devices or accounts used therewith. In addition, none of the above prior art references provides, for example, methods or processes for activating the devices for use in the context of entertainment or sporting events, especially over local or global data communications networks.

25

U.S. Patent 5,546,523 to Gatto (Gatto) is directed to an electronic fund transfer system utilizing Automated Teller Machines (ATMs) and identification cards unique to individual users. More specifically, as depicted in steps 410-429 of prior art FIG. 11 (FIG. 2 of Gatto), after inserting an identification card into an ATM a user may utilize a number of custom programmed transactions, individually selected by the user. For example, a particular user may routinely and repeatedly have use for a transaction in which he or she withdraws a set dollar amount from a savings account. With the invention of Gatto, the user may perform the above described transaction simply by pressing a single key. These custom designed transactions are stored on the card and are conveniently displayed in one or more transaction menus customized for each user. Even so, Gatto provides no disclosure of a

30

35

technique for initializing or activating an account or system for facilitating the purchase and/or provisioning of items on-line.

U.S. Patent 6,005,942 to Chan et al. (Chan) relates to a smart card which can facilitate a post-
5 issuance download of an application. As shown in prior art FIG. 12 (FIG. 4 of Chan), after issuance of a smart card, step 401, an application is forwarded to the smart card through any electronic media connectable to the smart card and any appropriate networks, step 402. Subsequently, the application is loaded onto the smart card using a card domain program step 404. This card domain is a special system application installed by the card issuer and provides platform wide services. Therefore, Chan provides
10 no disclosure of a technique for initializing or activating an account or system for facilitating the purchase and/or provisioning of items on-line.

Thus, the prior art has failed to disclose a technique for initializing or activating an account or system for facilitating the purchase and/or provisioning of goods or services, such as tickets or
15 entertainment items, over a data communication network.

SUMMARY OF THE INVENTION

In accordance with the principles of the present invention, a technique for initializing or activating an account over a data communication network, such as the Internet, is disclosed. Upon
20 activation or initialization, the account may be used to facilitate the purchase and provisioning of admittance to entertainment events and the like. These events may include, for example, movies, open seating events, reserved seating events, theatre, shows, sporting events, cultural events, and the like, or any combination thereof. In addition, items and services may also be purchased. For example, concessions and movie related merchandise may also be purchased and provisioned after activation of
25 the customer's account.

To activate his or her account, a communication is received from the customer via the data communication network requesting activation of the account. The communication may be transmitted from, for example, any of a personal computer, wireless phone, personal digital assistant, Bluetooth
30 enabled device, or any other similar device, and may include payment information, purchase selections, demographic information, as well as responses to surveys, and the like.

In response to the communication, an account is activated to allow storage of information regarding purchases made by the customer. In addition, an identifier is associated with the customer
35 and with the customer's account. Then in some embodiments, an identification device may be

distributed to the customer. For instance, the identification device may be distributed to the customer during his or her first visit to the theatre or venue, or it may be physically mailed to an address provided by the customer. The identification device may include, for example, a smart card, e-ticket, a credit card, or other similar object. Whatever the case, this identification device has the identifier stored therein and is utilizable for accessing the account at a point of sale for provisioning of the purchases.

In other embodiments, the identification device may already be in the possession of the customer. In these cases, the identifier may be transmitted via the data communication network to the customer's identification device where it is then stored in internal memory. Thus, the identifier may be stored in, for instance, the memory of a personal digital assistant, cellular phone, or other wireless or Bluetooth enabled device. In the same manner, the identifier may be written using, for example a smart card writer, to a smart card, or printed onto a paper ticket, or the like.

In addition, the identifier may be determined or generated by the customer or by some entity other than the activation system sponsor. For example, the customer may select his or her own identifier. With this example, the identifier is transmitted by the user from his or her client system to the main computing server, where the identifier may be stored and associated with the customer's account. Advantageously, the customer may utilize an identifier, and identification device, provided by a third party. In this example, the customer may be able to utilize, for instance, an automated teller machine card with a identifier generated by a third party bank as his or her identification device.

Likewise, biometrics information may be utilized as an identifier. In these cases, the biometrics information may initially be captured and stored by the user. Then, during the activation process, the biometrics information is transmitted to the main server where it may be associated with the customer's account. Alternatively, an account may first be activated without being associated with an identifier. Then, the customer's biometrics information may be scanned and associated with the account during his or her first visit to the theatre or other venue.

In other embodiments, the identification device may be delivered to the customer before activation of his or her account. For example, with mass audience targeting campaigns, low cost identification devices may be mailed or handed out to potential customers, along with account activation instructions. Each customer may then connect to the main server and activate his or her account. Similarly, instead of mailing the actual devices, advertisements may be mailed, either physically or electronically, prompting the customer to activate an account.

After activating his or her account, the customer may redeem purchases by presenting the identifier or identification device to an attendant at the theatre or venue. In particular, the attendant scans the identifier and accesses the customer's account to verify a ticket or other item or service purchase. After verification, the customer is admitted and his or her account is updated to indicate that the purchase has been redeemed.

Having summarized some of the aspects of the initialization features of the present invention, the provisioning and initialization process and system is now briefly discussed.

The ZebraPass™ system advantageously provides the backend, ticketing technology to existing portal sites such as MovieTickets.com so that the site may provide a better experience for the consumer.

In this example, movie ticket purchases are made online under the following, easy procedure:

1. Moviegoer visits a leading portal such as MovieTickets.com or other portal and selects a movie, theatre, and desired time.
2. Moviegoer is linked to ZebraPass.com™ or other portal connection that accesses the system of the present invention and pays for movie tickets via a credit card in a secure transaction or other payment/ordering procedure.
3. Moviegoer's ticket is electronically transferred from, for example, the ZebraPass™ host server to the theatres' network connector.
4. With the "ZebraPass" smart card, moviegoer avoids box office lines and proceeds directly to the attendant who collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub in half, simply flashes the "ZebraPass" or smart card onto the smart card reader, identifying the moviegoer as the ticket holder.

ZebraPass is a system built for today but scalable enough to comport with plans for tomorrow. ZebraPass electronically transfers the movie ticket to the theatre rather than transferring the ticket directly to the smart card. This alleviates the need for the consumer to have a smart card reader on their home PC. It also makes the system compatible with smart devices. As the smart card merely acts as an identifier, and since all of the ticket information is stored on the ZebraPass server, ZebraPass will duplicate this identification/server model to permit the smart device to act as the identifier while maintaining the ticket information on the server. This enables ZebraPass to use the developed smart card infrastructure for the smart devices.

Enabling Technology for Professional Sports Teams Season Tickets Online/Smart Cards

Professional sports ticketing permits the venue to grant a VIP status to its season ticket holders. The ZebraPass can be tied into numerous programs that set them apart from the single game ticket holder.

➤ *Season Tickets*

- Season ticket holders will have all their season tickets on one smart card or smart device.

➤ *Parking*

- Ticket holder will have access to VIP parking where he/she can only enter upon flashing the card upon the reader

➤ *Debit*

- The venues can add a debit feature to the card and collect the float on the interest from the card.

➤ *Club Seats*

- Provides access to privileged parts of the stadium.

➤ *Fewer Employees*

- No employee is needed to control the entrance to the VIP section

➤ *Loyalty points*

- Loyalty can be tied directly into the card and will work with the venue's participating merchants.

Demographic Information

By having each prospective user register demographic information on the site such as age, zip code, and entertainment interests, ZebraPass™ will be able to generate key demographic information that was previously unknown. This is known as "ZebraPass Knowledge Management."

ZebraPass Knowledge Management is the process of acquiring information about moviegoers, turning the information into specific knowledge, then deploying that knowledge throughout the business to enable:

- Consumer focused planning and decision making,
- Consumer knowledge based marketing, and
- Intelligent, real time interaction with consumers at every contact point.

ZebraPass Knowledge Management is a component of a well-rounded ZebraPass Relationship Management strategy. Benefits include:

- Increased sales revenue and profit
- 5 ➤ More precise demand forecasts
- Improved customer retention, satisfaction and loyalty
- New market/opportunity identification for business growth
- Rapid, centralized tracking and measurement of marketing ROI
- Enables a capital budget approach to marketing investments
- 10 ➤ Flexibility to respond to rapidly changing marketing conditions
- Improved customer service

ZebraPass™ will provide value to many different groups including ticket portals, movie theatres, consumers, and sports teams.

15

Value Proposition to *ticket portals*:

- Increase Revenues
 - Increase advertising space
- 20 ➤ Increase Exposure
 - Increase stickiness
 - Create advantage over competition
 - Branding opportunities on the “ZebraPass”

25 Value Proposition to *movie theatres*:

- Lower Costs
 - Decrease costs incurred via printing fewer movie tickets at the box office
 - Decrease number of employees at the box office as a result of increased smart card usage
 - 30 • Eliminate need for kiosk machines
- Increase Revenues
 - Increase efficiency at concession stand
 - Improve sales of tickets and concessions from key demographic information
- Exposure
 - 35 • Improve safety due to the decrease in the amount of cash handled at the theatres

- Ensure that parent's money given to their children is actually spent on the concessions
- Eliminates fraudulent activity

Value Proposition to *sports teams/ stadiums*:

5

- Improve demographic information to improve box office gross
- Direct marketing
- More focused advertising on the website
- Loyalty points and gift certificates
- 10 ➤ Parking
- Debit
- VIP status

Value Proposition to *theme parks*:

15

- VIP status
- Increased Efficiency
- Parking
- Loyalty points
- More targeted advertising to consumers

20

Value Proposition to *consumers*:

- Shorter lines at the box office
- Greater convenience at the concession stand and box office
- 25 ➤ Easy way to control your family budget
- College students can charge their tickets and concessions on their credit cards
- On line student and senior citizen registration to ensure discounts
- No need to use their credit card to redeem their ticket

30

As the concepts of the present invention work seamlessly with non-assignable and assignable seat venues, ZebraPass™ will rapidly evolve the ticketless concept to the next realm:

With the introduction of the standard Bluetooth technology, ZebraPass will utilize smart devices such as cell phones, PDAs, and pagers and other devices enabled with wireless application protocol (WAP). The ticket will be purchased via a smart device and redeemed using that same smart device.

35

For example:

5 A Miami Heat fan steps out of his/her home on the way to the stadium. Using a WAP enabled
wireless device, he is able to check the schedule for the game and then purchase a ticket on the way to
the arena. The ticket is transferred electronically to the venue and will be matched accordingly with
his/her identification which can be found in the phone. On the way to the arena, he/she is able to check
weather reports to determine whether or not he/she needs his/her umbrella while he walks to the game.
He/she arrives at the arena and walks past the Bluetooth enabled reader with the cell phone still in
10 his/her pocket. The reader matches the code of the phone to that of the electronic ticket and permits our
Miami Heat fan to enter, all in 1/10 of a second.

Products/Services

15 ZebraPass serves, for example, two ticket market niches, the individual ticket market and the
season ticket professional sports team market.

In one example, individual ticket purchases are made online under the following procedure:

- 20 1. Ticketholder visits a leading site such as MovieTickets.com and selects an event, venue, and
desired time.
2. Ticketholder is linked to ZebraPass.com and pays for the ticket with a credit card in a secure
transaction.
3. Ticketholder's ticket is electronically transferred from ZebraPass™ host server to the venue's
network connector.
- 25 4. With the "ZebraPass" contactless card, ticket holder avoids lines and proceeds directly to the
attendant who normally collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub
in half, simply flashes the "ZebraPass" onto the smart card reader, identifying the individual as the
ticket holder.

30 In another embodiment, Zebypass allows online users to purchase concessions in advance and
with a credit card.

To eliminate fraud, once a smart card has been flashed onto the real-time point-of-sale system, it becomes invalid.

As another example, season ticket purchases are made under the following procedure:

1. Ticketholder visits a leading professional sports team web site to purchase season tickets.
2. Ticketholder is linked to ZebraPass.com and pays for the tickets with a credit card in a secure transaction.
3. Season ticket holder's ticket is electronically transferred from ZebraPass™ host server to the venue's network connector.
4. With the "ZebraPass" contactless card, ticket holder avoids lines and proceeds directly to the attendant who normally collects the ticket stubs.
5. An easy-to-use smart card reader is provided to the attendant who, rather than tearing the ticket stub in half, simply flashes the "ZebraPass" onto the smart card reader, identifying the individual as the ticket holder.

The present invention provides an initialization or activation process for facilitating the purchase of items and services such as event tickets online. In addition, the present invention provides an initialization process implementable and utilizable over a data communication network connectable with a user or client system and a server and/or point of sale system.

The present invention also facilitates the provisioning of demographic information to program sponsors. By having each user register demographic information such as age and interests during, for example an initialization process, the present invention compiles information for advertising and marketing use. Using this information, the present invention allows event sponsors to create custom offerings to users. Similarly, the invention allows a sponsor to leverage user and market information to create programs that address evolving user needs for targeting and acquiring new customers.

The present invention provides marketing opportunities for the events themselves and/or event related merchandise at an entertainment site. This allows users to shop for tickets, concessions, and event-related merchandise at a single time and location. Further, the present invention applies these concepts to a wide variety of venues such as movies, concerts, sporting events, cultural activities, reserved seating events, events requiring advanced ticket purchase, and/or other similar and analogous events.

To accomplish the above, a user first visits a leading portal, for example, Yahoo! or CitySearch, and selects an event and a desired time. Next, the user is linked to a server, where he or she purchases a ticket and/or concessions and other merchandise with, for example, a credit card, in a
5 secure transaction. The event ticket is then transferred to the user's account, which in turn is associated with a smart card in the possession of the user. With the smart card in hand, the user avoids any box office lines and proceeds directly to an attendant or a point of sale (POS) server or system. The user then presents the smart card to the attendant or POS who reads the smart card using a reading device. After reading the smart card, the attendant or POS accesses the user's account and verifies that a ticket
10 has indeed been purchased before admitting the user.

In another embodiment, a registration form is first completed by the user in an initialization process. Subsequently, the user selects an event and pays for the ticket with, for example, a credit card in a secure e-commerce transaction. Then, in this embodiment, a bar coded ticket or receipt is
15 generated and printed by the user. With the bar coded ticket or receipt in hand, the user avoids the box office lines and proceeds directly to an attendant or POS who collects the ticket, verifies the purchase optionally automatically via a bar code reader, and admits the user to the movie screen.

In these embodiments, a scanner is utilized by the movie theatre attendant who, rather than
20 tearing the ticket stub in half, simply scans the bar code with the scanner to verify that a ticket purchase has indeed been made by the user. Similar processes may be used for the purchase of merchandise and concessions. Furthermore, to eliminate fraud, once a ticket has been scanned into the real time point of sale system, it cannot be used again. Alternatively, the present invention is implemented in a fully automated setting without human intervention, except in the event of a failure or when assistance is
25 needed.

In other embodiments, the present invention utilizes credit cards, smart cards, or cards with memory media embedded therein, or other portable devices, such as wireless phones, wireless pagers, personal digital assistants, or Internet-ready watches as an alternative or in addition to the printed
30 tickets.

In one embodiment, the present invention relates to initializing an account for use in purchasing and provisioning an item or service to an event customer via a data communication network. This embodiment includes receiving a communication from the customer at a server via the data
35 communication network, requesting activation of the account. In response to the communication, the account is activated to allow storage of information therein regarding a purchase made by the customer

including admittance to at least one entertainment event and optionally concession purchases to be provided to the event customer at the at least one event. Also in response to the communication, an identifier is associated with the customer. This embodiment also includes distributing an identification device to the customer. This identification device has the identifier stored therein and is utilizable for
5 accessing the account at a point of sale for provisioning of the purchase and to admit the event customer to the at least one entertainment event.

In another embodiment, the present invention relates to initializing an account for use in purchasing and provisioning an item or service to an event customer. This embodiment includes
10 receiving a communication from a user requesting activation of the account. This embodiment also includes activating, in response to the communication, the account to allow storage of information therein regarding a purchase made by the user including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event. Then an
15 identification device is distributed to the user upon verifying activation of the account. This identification device is utilizable for accessing the account at a point of sale for provisioning of the purchase and to admit the user to the at least one entertainment event.

In yet another embodiment, the present invention relates to initializing an account for use in purchasing and provisioning an item or service to an event customer. This embodiment includes
20 receiving a communication from a user requesting activation of the account. In response to the communication, the account is activated to allow storage of information therein regarding a purchase made by the user including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event. Also in response to the communication, an identifier is associated with the user. This embodiment also includes transmitting the identifier to
25 the user for storage in a memory of an identification device utilizable for accessing the account at a point of sale for provisioning of the purchase and to admit the user to the at least one entertainment event.

In yet another embodiment, the present invention relates to initializing an account for use in
30 purchasing and provisioning an item or service to an event customer. This embodiment includes distributing an identification device to a user. The identification device, in turn, has an identifier stored therein. This embodiment also includes receiving a communication from the user requesting activation of the account. Then, the embodiment includes activating, in response to the communication, the account to allow storage of information therein regarding a purchase made by the user including
35 admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event. This account is accessible at a point of sale for provisioning of the

purchase upon presentation of the identification device and to admit the user to the at least one entertainment event.

Thus, any or all of the following advantages may be provided by the present invention:

5 decrease costs incurred via printing fewer movie tickets at the box office; decrease the number of employees at the box office as a result of increased home based printing and smart card usage; increase efficiency at concession stands; provide another method and outlet to sell tickets and concessions; sell more tickets using e-mail messages; improve sales of tickets and concessions from key demographic information; receive a portion of advertisement sales; improve safety due to the decrease in the amount
10 of cash handled at the theatres; ensure that parents' money given to children is actually spent on the concessions; shorter lines at the box office; greater convenience at the concession stand and box office; advance sales; more information about movies before purchase of ticket; easy way to control a family budget; greater access to merchandise; improve demographic information to improve sales; direct marketing; higher impact for advertising via e mail messages; and/or more focused advertising.

15 There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are, of course, additional features of the invention that will be described hereinafter and which will form the subject matter of the claims
20 appended hereto.

In this respect, before explaining at least one embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings.
25 The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

As such, those skilled in the art will appreciate that the conception, upon which this disclosure
30 is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions insofar as they do not depart from the spirit and scope of the present invention.

35 Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially the scientists, engineers and practitioners in the art who are not

familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to be limiting as to the scope of the invention in any way.

5

These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be had to the accompanying drawings and descriptive matter in which there is illustrated preferred embodiments of the invention.

10

Other objects of the present invention will be evident to those of ordinary skill, particularly upon consideration of the following detailed description of the preferred embodiments.

15

NOTATIONS AND NOMENCLATURE

The detailed descriptions which follow may be presented in terms of program procedures executed on computing or processing systems such as, for example, a stand-alone gaming machine, a computer or network of computers. These procedural descriptions and representations are the means used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art.

20

A procedure is here, and generally, conceived to be a self-consistent sequence of steps leading to a desired result. These steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared and otherwise manipulated. It proves convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like. It should be noted, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities.

25

30

Further, the manipulations performed are often referred to in terms, such as adding or comparing, which are commonly associated with mental operations performed by a human operator. No such capability of a human operator is necessary, or desirable in most cases, in any of the operations described herein which form part of the present invention; the operations are machine operations.

Useful machines for performing the operation of the present invention include general purpose digital computers or similar devices.

BRIEF DESCRIPTION OF THE DRAWINGS

5 FIG. 1 is a graph illustrating the amount of money spent on movie admissions in recent years in the United States;

 FIG. 2 is a table illustrating the number of movies attended by U.S. residents in recent years;

 FIG. 3 is a chart illustrating an analysis of movie advertising costs;

 FIGS. 4a - 4d illustrate an analysis of e-mail as a vehicle for advertising campaigns;

10 FIG. 5 illustrates a prior art Internet capable browser dispenser architecture;

 FIGS. 6 - 7 illustrate a prior art interactive game system;

 FIG. 8 illustrates a prior art sports team organizer;

 FIG. 9 illustrates a prior art portable computerized pari-mutuel sports entertainment system;

 FIG. 10 illustrates a prior art cryptographically assisted commercial network system;

15 FIG. 11 is a flow chart illustrating operation of a prior art electronic fund transfer system;

 FIG. 12 is a flow chart illustrating operation of a prior art system which allows post-issuance downloading of applications onto a smart card;

 FIG. 13 depicts one example of an architecture capable of implementing the present invention;

 FIG. 14 illustrates some of the interactions occurring between a proxy and a POS system;

20 FIG. 15 illustrates some of the interactions occurring between identification devices and a theatre/venue system;

 FIG. 16 illustrates some of the interactions occurring between identification devices and a theatre/venue system in a Bluetooth enabled embodiment of the present invention;

 FIG. 17 depicts another example of an architecture capable of implementing the present
25 invention;

 FIG. 18 depicts yet another example of an architecture capable of implementing the present invention;

 FIGS. 19a - 19b depict a flow diagram illustrating one example of an initialization or activation routine in accordance with the principles of the present invention;

30 FIG. 20 is a flow diagram illustrating another example of an initialization or activation routine in accordance with the principles of the present invention;

 FIG. 21 is flow diagram illustrating yet another example of an initialization or activation routine in accordance with the principles of the present invention;

 FIGS. 22a - 22b depict a flow diagram illustrating one example of an initialization or activation
35 routine suitable for use with wireless or Bluetooth enabled devices;

FIG. 23 depicts a flow diagram illustrating another example of an initialization or activation routine suitable for use with wireless or Bluetooth enabled devices;

FIG. 24 depicts a flow diagram illustrating yet another example of an initialization or activation routine suitable for use with wireless or Bluetooth enabled devices;

5 FIG. 25 depicts a flow diagram illustrating one example of an initialization or activation routine utilizing biometrics information as an identifier;

FIG. 26 depicts a flow diagram illustrating another example of an initialization or activation routine utilizing biometrics information as an identifier;

10 FIG. 27 is a flow diagram illustrating one example of a process used for purchasing items in accordance with the principles of the present invention;

FIG. 28 is a flow diagram illustrating one example of another process used for purchasing items in accordance with the principles of the present invention;

FIG. 29 is a flow diagram illustrating one example of a process used for redeeming items purchased in accordance with the principles of the present invention;

15 FIG. 30 depicts a combined architecture and process diagram illustrating a purchase and redemption process in accordance with the principles of the present invention;

FIG. 31 is a flow diagram illustrating one example of yet another process used for purchasing items in accordance with the principles of the present invention;

20 FIG. 32 is a flow diagram illustrating one example of yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 33 depicts a combined architecture and process diagram illustrating yet another purchase and redemption process in accordance with the principles of the present invention;

FIG. 34 is a flow diagram illustrating one example of still yet another process used for purchasing items in accordance with the principles of the present invention;

25 FIG. 35 is a flow diagram illustrating one example of still yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 36 depicts a combined architecture and process diagram illustrating still yet another purchase and redemption process in accordance with the principles of the present invention;

30 FIG. 37 is a flow diagram illustrating another example of still yet another process used for purchasing items in accordance with the principles of the present invention;

FIG. 38 is a flow diagram illustrating another example of still yet another process used for redeeming items purchased in accordance with the principles of the present invention;

FIG. 39 depicts a combined architecture and process diagram illustrating still yet another purchase and redemption process in accordance with the principles of the present invention;

35 FIG. 40 illustrates one example of a central processing unit for implementing a computer process in accordance with a computer implemented embodiment of the present invention;

FIG. 41 illustrates one example of a block diagram of internal hardware of the central processing unit of FIG. 40;

FIG. 42 illustrates another example of a block diagram of internal hardware of the central processing unit of FIG. 40;

5 FIG. 43 illustrates one example of a memory medium which may be used for storing a computer implemented process of the present invention; and

FIG. 44 illustrates an example of a combined Internet, POTS, and ADSL architecture which may be used to implement the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

Reference now will be made in detail to the presently preferred embodiments of the invention. Such embodiments are provided by way of explanation of the invention, which is not intended to be limited thereto. In fact, those of ordinary skill in the art may appreciate upon reading the present specification and viewing the present drawings that various modifications and variations can be made.

15 For example, features illustrated or described as part of one embodiment can be used on other embodiments to yield a still further embodiment. Additionally, certain features may be interchanged with similar devices or features not mentioned yet which perform the same or similar functions. It is therefore intended that such modifications and variations are included within the totality of the present invention.

20 In accordance with the principles of the present invention, users are provided with the ability to activate or initialize an account which may then be used to facilitate the purchase of items and services including tickets and concessions and/or other merchandise online. Initially, a communication or request is transmitted from a user's client system to a main computing server via a data communication
25 network such as the Internet, requesting activation of an account. The client system may include, for example, any of a personal computer, cellular phone, personal digital assistant, Bluetooth enabled device, or any other similar device. In addition to requesting activation of the account, the communication may include credit card or other payment information, name, address, personal information, movie or other event preferences as well as any purchase selections, and the like.

30 In response, the account is activated to allow storage of information regarding purchases made by the customer. After activating an account, an identifier is generated or selected and associated with the customer or customer's account. This identifier may then stored or written to an identification device, which is distributed to the customer and utilized to access the customer's account at a point of
35 sale for provisioning of the purchases. In some examples, the identification device may be distributed

to the customer during his or her first visit to the theatre. In other cases, it may be physically mailed to an address provided by the customer.

In other embodiments, a device already in the possession of the user may be implemented as the identification device. In these embodiments, an identifier may be transmitted from the main computing server to the user's client system, where it may be written or stored in the identification device. In addition, an identifier may be determined or generated by the user or some other entity and transmitted to the main computing server. In this case, after receiving the identifier, the main computing server stores or associates the identifier with the customer's account.

Biometrics information may also be utilized as an identifier. In particular, the biometrics information may be captured and transmitted to the main server during the activation process. Then, after receiving the biometrics information, the main computing server stores or associates this information with the customer's account. Alternatively, an account may first be activated without being associated with an identifier. Then, the user's biometrics information may be scanned and associated with the account during his or her first visit to the theatre or other venue.

An overview of one example utilizing the concepts of the present invention is now summarized.

Identification Device

Smart cards are provided as one example of an identification device suitable for use with the present invention. Smart cards are standard credit or debit sized cards that contain an embedded integrated circuit. The integrated circuit in a smart card has processing capability and extensive storage. Smart cards have many advantages over conventional magnetic stripe cards due to their processing capability, greater storage capacity and resistance to counterfeiting.

Smart cards can either be contact or contactless. Contact smart cards typically are inserted into a reader, while contactless smart cards need only to be passed within a close proximity of a reader. By using Radio Frequency (RF) technology, contactless cards can complete a transaction in 1/10 of a second, thereby allowing rapid consumer throughput through a transaction point.

The speed, security and flexibility of contactless smart cards has led to their rapid adoption by mass transit authorities around the world, including the Washington DC area Washington Metropolitan Area Transit Authority (WMATA).

Usage Scenarios

The ZebraPass system in this embodiment can be described in four use scenarios.

- 1) Consumer
- 2) Theater/ Stadium
- 5 3) ZebraPass
- 4) Web portal using the ZebraPass system

Consumer Use- Theaters/ Professional Sports Teams

The consumer using the system has four use scenarios:

- 10 1) Web enrollment
- 2) Web usage of ZebraPass consumer services
- 3) Claim smart card at the theater
- 4) Redeem ticket (with smart card) at theater

15 Web enrollment

Web enrollment is a user's entry to the system. The user goes to a web portal, and makes a request to purchase tickets online. The portal employs the ZebraPass system to perform a user registration process, which results in assigning a user ID and password. The registration information, including the user's credit card information, is then stored in the ZebraPass system. Cardholder
20 verification is then performed. At the end of the process, the user has a means of securely logging onto the system, and the ZebraPass system has stored all of the information, necessary to complete purchases.

In the case of a consumer purchasing their season tickets online, the season ticket holder will
25 receive their ZebraPass card directly from the ticket office. The purchase of the season ticket package can be made either directly on the team's website or offline. After the purchase of the season ticket package, the season tickets are stored directly on the ZebraPass system.

Web usage of ZebraPass consumer services

30 Once a user is registered to the ZebraPass system, the user can access its services through the portal/ team's website.

Services include:

Theaters

- Obtaining show time information for a particular theater.
- Buying tickets for theater seats.
- Buying concessions.
- 5 • Viewing and canceling purchases.

Sports Teams

- Obtaining season ticket information for a particular team.
 - Buying tickets for a season.
 - 10 • Adding a debit amount of concessions for the season.
 - Transferring tickets to another user on the system.
 - Purchasing preferred parking for the stadium.
 - Accessing loyalty points on the ZebraPass system.
- 15 The user interacts with the Web portal, which in turn accesses the ZebraPass system to maintain the user's session state, and to access ZebraPass services.

When the user makes or changes purchases through ZebraPass, the record of the transaction is not stored on the ZebraPass smart card. Instead, it is stored in the venue's point of sale (POS) system.

20 Thus, "inventory" resides at the venue. The ZebraPass smart card is used for identification of the user. The user therefore does not need to have a smart card reader on his or her own computer. A smart card reader is only required at the theater/stadium POS system.

In addition to using a ZebraPass smart card, the ZebraPass system may eventually support the

25 use of other contact or contactless smart cards.

Claim smart card

If the user does not have a supported smart card, they can obtain a ZebraPass smart card at a participating theater or stadium.

30

The consumer needs a smart card only for the purpose of authentication at the theater/stadium. The first time the user uses the ZebraPass system online, a record of the transaction is created in the ZebraPass system. Once a record is created, the consumer can go to any participating theater/stadium

and obtain their smart card. Theater/Stadium personnel issue the smart card, and the user's identity is stored in the consumer's ZebraPass file. The card issuing transaction is performed by the ZebraPass System.

5 Redeem ticket (with smart card) at theater/stadium

Once the user has either a ZebraPass smart card or any smart card that is supported by the ZebraPass system, they can use it to enter shows/games at that or any participating theater/stadium. The user redeems a ticket purchase by proceeding directly to the desired show/game for which a ticket was purchased, and flashing the ZebraPass smart card past a ZebraPass proximity (contactless) smart card
10 reader. (If a non-ZebraPass card is used, and the card used is a contact smart card, the card will instead have to be inserted into a smart card reader. The ticket redemption procedure is the same, however.)

The smart card reader at the theater/stadium communicates with the theater's POS system. ZebraPass software in the system interacts with the user's smart card and attempts to authenticate the
15 user. If authentication is unsuccessful, a message indicating failure is displayed on a panel in the smart card reader. In this case, the user is not admitted to the show/game.

If authentication is successful, the ZebraPass system looks in its database stored in the theater or stadium's POS system, and verifies that this user has purchased a ticket for show/game that is
20 currently being admitted. Again, if this test fails, the user is rejected. If, however, this test succeeds, the user's ticket is redeemed, marked as a "stub", and the user is admitted.

Using a smart card reader attached to the ZebraPass system, a similar procedure is used to claim packaged concessions purchased online through the ZebraPass system. The user's smart card is
25 used to authenticate the user, and ZebraPass software in the theater POS system verifies a prior online purchase of concessions and displays what the concessions have been purchased enabling the concession staff to transfer the concessions. The sale of "packaged" concessions should result in a shorter waiting line at the concessions stand. In the case of sporting events, concession purchases simply go against the existing value currently residing on the card itself.

30

Theater Use

A participating theater will typically implement software support in at least these areas of functionality:

- 1) Viewing current ZebraPass purchases, as well as other management data.

- 2) The ability to interact directly with and override the ZebraPass system in order to expedite customer service requests.
- 3) The ability to obtain marketing or demographic information related to ZebraPass purchases for their theater.
- 5 4) The ability to monitor the status of the theater's ZebraPass connection, and the ZebraPass server, as well as to view and verify the information that is being presented to users for their theater.

Note that when a consumer makes a ticket purchase through the ZebraPass system, two transactions typically occur:

- 1) The ticket purchase is charged to the consumer's credit card.
- 10 2) The ZebraPass system makes a payment to the theater.

Stadium Use

A participating stadium will need software support in at least these areas of functionality:

- 1) Viewing current ZebraPass purchases, as well as other management data.
- 15 2) The ability to interact directly with and override the ZebraPass system in order to expedite customer service requests.
- 3) The ability to obtain marketing or demographic information related to ZebraPass purchases for their stadium.
- 4) The ability to monitor the status of the stadium's ZebraPass connection, and the ZebraPass server,
- 20 as well as to view and verify the information that is being presented to users for their event.

Note that when a consumer makes a ticket purchase through the ZebraPass system, two transactions actually occur:

- 1) The ticket purchase is charged to the consumer's credit card.
- 2) The ZebraPass system makes a payment to the sports team.

25

ZebraPass Use

The ZebraPass system operates as a service on a 24X7 basis to provide customer support. This will require administrative functions to monitor the status of the system, its usage, and the status of sessions and transactions in progress. Accounting services will also be provided to manage ZebraPass financial accounts and payments made to theaters and sports teams. The ZebraPass system will also provide administrative services.

30

Web Portal Use

Web portals, which employ the ZebraPass system in order to provide online ticket purchasing

to end-users, must interface to the ZebraPass system. The ZebraPass system is designed to make this integration as simple as possible.

Once integrated with the ZebraPass system, a portal/team web site needs to monitor its usage of the ZebraPass.

System Architecture

The overall architecture of the ZebraPass System is illustrated in FIG. 13 and is divided into three major components: web portals 501, a ZebraPass server 505, and theaters 509. ZebraPass customers 511 purchase tickets by using a set of dynamically generated web pages that are provided through a web portal 501 such as MovieTickets.com or PhoenixCoyotes.com. Through these web pages, a customer 511 can send requests to purchase tickets to a ZebraPass server 505 which also resides on the Internet 512. The ZebraPass server 505 accepts customer requests from the participating web portals 501 and forwards them to the appropriate theaters/sports teams 509.

A ZebraPass System 513, which may include the ZebraPass Internet proxy software and hardware, resides at the theater/stadium site to accept requests from the ZebraPass server 505. The ZebraPass system 513 interacts with the theater or stadium's POS system 521 to request ticket purchases and report results back to the ZebraPass server 505, which in turn forwards that information to the customer 511 via the web portal 501. The ZebraPass System 513 is designed to integrate with any of the top POS systems, which include Pacer/CATS and Radiant Systems. In addition, the ZebraPass System 513 manages the smart card readers 525.

ZebraPass Server

The ZebraPass server 505 consists of a scalable application server cluster and a database system 529. The application server stores all transactions in the database 529, as well as customer demographic information and cached show time/game information. It completes transactions with theater/stadium systems and credit card processors in real time. ZebraPass software on the application server implements the ZebraPass system's services, including ticket purchasing, show time requests, game times, etc.

ZebraPass Internet Proxy

The ZebraPass Internet proxy 517 serves as a front end to the ZebraPass System 513. It brokers the ZebraPass customer's ticket requests to a theater/stadium's POS 521 and issues requests for

tickets and show times/games. The Internet proxy 517 displays to the end user all output from the ZebraPass system 513 that the user needs to see. To accomplish this, a software component is installed on the portal system to communicate with the ZebraPass server 505.

5 Stadium/Theater System

The stadium/ theater system tier consists of the internet proxy 517 described above, ZebraPass software, and the stadium/ theater POS system 521. It also includes smart card readers 525 which serve the purpose of validating ZebraPass ticket holders as well as activating new customer cards. The system to which the smart card reader is attached also displays information about purchases, such as which
10 concessions were purchased, and for which shows/game a user has purchased tickets.

The ZebraPass system 513 communicates with the theater/stadium POS system 521 in order to obtain information on the number of available seats for a given show/game, to obtain a list of available shows/games, and to initiate and complete purchases which are paid for by the ZebraPass system.

15

ZebraPass Integration with POS System

ZebraPass Internet Proxy to POS Interface

The point of integration between ZebraPass 505 and the POS system 521 is the ZebraPass internet proxy 517. All of these subsystems reside either in the theater/stadium itself or somewhere on
20 the theater or stadium's wide area network (WAN). FIG. 14 provides an overview of the interactions between the proxy 517 and a theater supported POS system 521.

The two types of customer requests which involve communication with the theater's POS system 521 are ticket purchases 604 and movie show times 608. The POS system 521 uses the same
25 interface to respond with purchase confirmation/failure information 612 as well as movie listings 616. A customer's request for movie show times 616 does not automatically result in a query of the theater's POS system. Since movie show times do not change that often, the system can be configured to issue updates 620 to the ZebraPass server 505 whenever movie listings or show times change.

30 In the use of a stadium system, the POS system and the ZebraPass system must communicate and interface in order to transfer tickets via a secure authentication. This process must be done to ensure that the correct recipient receives the ticket, that the ticket can only be used once, and ensure that the ticket cannot be duplicated.

ZebraPass Internet Proxy to Smart Card Hardware Interface

Although the ZebraPass smart card hardware and software are installed at the theater/stadium site, they operate independently of the theater/stadium POS system 521. POS systems 521 do not need to be modified to communicate with smart cards because this function is managed by the ZebraPass software. FIG. 15 illustrates the interactions between smart cards 701 and the ZebraPass system 513.

The ZebraPass to smart card interface consists of two primary interactions. The first scenario involves new user registration. When a new customer has purchased tickets with ZebraPass for the first time, he/she must claim a ZebraPass smart card 701 at the theater or stadium. The customer presents a major form of identification such as a driver's license or credit card. A stadium/theater employee performs a lookup of the customer in the ZebraPass database 529. If a match is made, the ZebraPass system will issue a command to the smart card reader 525 to activate the new customer's identification number on a ZebraPass smart card (step 704), which is subsequently given to the customer (step 708). ZebraPass customers only need to do this the first time they purchase tickets.

The second scenario occurs when a card-holding customer redeems a ticket. After purchasing tickets through a participating ZebraPass web portal, the customer redeems his or her ticket simply by walking through a smart card reader 525 located at the theater/stadium. When the customer presents the ZebraPass card (step 712), the smart card reader 525 will detect the ZebraPass identification number on the card and send it to the ZebraPass system software (step 716). The software will perform a lookup of this number in its local database 529. Note that the ZebraPass database 529 is located on-site with the ZebraPass system 513, making the validation process almost instantaneous. The ZebraPass database contains a copy of the master inventory contained in the POS database 529. Once the system has found a match between the ZebraPass ID and an existing seat reservation, a confirmation is sent back to the smart card reader display, indicating that the customer is allowed to enter the theater/stadium.

Bluetooth Smart Devices

In another implementation of its ticketing purchasing system, ZebraPass adds ticketing by wireless devices. As depicted in FIG. 16, instead of using a contactless smart card, wireless devices such as cell phones and PDAs 801, utilizing Bluetooth, will be used to identify the ticket holder and vend (electronically) a ticket.

Bluetooth is a low-power radio that fits into a small chip set that will be embedded into devices like cell phones and PDAs which could then communicate with other Bluetooth devices in unlicensed spectrum. The Bluetooth Special Interest Group includes Intel, Nokia, Toshiba, IBM, 3Com, Lucent Technologies, Microsoft, and Motorola.

5

Through the use of smart handheld devices such as cellular phone, personal digital assistants, pagers and communicators 801, goods and services can now be purchased from the Internet by use of the wireless application protocol which extends the functionality of the web and its services onto wireless devices.

10

The ZebraPass server electronically transfers the ticket from the host server to the theatre's point of sale which then integrates, through the ZebraPass software, with the Bluetooth enabled reader. As the person walks past the reader, the reader identifies the smart device (step 809), through Bluetooth, as identity of the ticket holder thereby permitting the person to enter the venue (step 813).

15

Another example of an architecture utilizable for implementing the features of the present invention is depicted in FIG. 17. In this embodiment, one or more of a plurality of individual computers or communications systems (clients) 1710, 1712, 1714, and 1716 are linked to one other and to main computing server 1720 via communication network 1730. Communication network 1730 may include one or more shared data buses or links, point-to-point dedicated dial-up connections, private networks, the Internet or Internet 2, and any other analogous or similar connections or network(s). Clients 1710, 1712, 1714 and 1716, on the other hand, include any number of devices useable by a user to interface and communicate with main computing server 1720.

20

25

In a first example, computing systems or clients 1712 may include personal computers operating, for example, an Internet browser, connected to network 1730 by conventional telephone service (POTS) via, for example, standard telephone modems. In another example, computing systems or clients 1714 may include other similar computing devices connected to network 1730 via a private local or wide area network 1734. Likewise, the computing systems may be connected via ISDN lines, T1 connections, or the like, using any suitable or analogous technologies and protocols including Multipoint Multichannel Distribution Service (MMDS), Digital Subscriber Line (DSL), Asynchronous Subscriber Line (ADSL), satellite service, and/or the like. For instance, computing systems or clients 1710 may be connected to network 1730 through cable television systems utilizing cable modems 1711.

30

35

The particularities of the computing and communications systems used to access main computing server 1720 are irrelevant. What is important however is that the client systems allow a user

to access main computing server 1720. To illustrate this point, the client systems are not limited to being conventional computers. For instance, clients 1716 may include Internet-ready television units, or portable devices including digital or other wireless telephones, personal digital assistants (PDA), wireless two-way pagers, Internet-ready watches, and other similar devices including standard
5 Bluetooth enabled devices or devices implementing, for example, Wireless Application Protocol (WAP) and accessing the Internet through a Windows CE or Palm OS device. Hence, as an example, a menu-driven WAP phone may incorporate a mouse, instead of or in addition to a small keypad to access main computing server 1720. Similarly, main computing server 1720 may be viewed on a cell-
10 phone or Internet ready watch display.

With embodiments utilizing standard Bluetooth technology, a tiny Bluetooth microchip, incorporating a radio transceiver, is built into the digital devices. The Bluetooth technology makes all connections instantly and without usage of cable or wires. It facilitates fast and secure transmissions of both voice and data, even when the devices are not within line-of-sight. The radio operates in a
15 globally available frequency band, ensuring compatibility worldwide.

In these embodiments, the Bluetooth enabled devices communicate spontaneously to offer, for example, voice/data point access; cable replacement; and personal ad-hoc networks. Voice/data access points are enabled by recognizing and connecting to different types of networks through a Bluetooth
20 connection. For instance, a Bluetooth enabled mobile phone can connect to the Internet as simply as any wire-bound connections. Cables can also be eliminated with Bluetooth technology even when the devices are not within line-of-sight. Furthermore, all Bluetooth-enabled devices can be set up to automatically exchange information and synchronize with one another. For instance, appointments scheduled on a handheld device can automatically be accepted in a desktop PC as soon as the devices
25 are within range of each other.

Bluetooth technology is fully functional even in noisy radio environments, and its voice transmissions are audible under severe conditions. The technology provides a very high transmission rate and all data are protected by advanced error-correction methods, as well as encryption and
30 authentication routines for the user's privacy. For further information regarding Bluetooth enabled devices and the Bluetooth standard, see, the Bluetooth White Papers in Appendix A of U.S. Patent Application No. 09/702,794, filed November 1, 2000. Copies of the Bluetooth specification can be ordered by fax at: Bluetooth SIG, Fax +46 70 615 9049.

35 To further dispel the notion that the clients need be conventional computers, it is also possible that the clients may be located in public areas, such as, for example, at a kiosk in a shopping mall. As

yet another example, computing systems or clients 1716 may include any one or more of the above mentioned portable wireless devices linked to and in communication with a central office or communications center 1718. For instance, with wireless PDAs, clients 1716 may be linked to a wireless LAN or other network via, for example, a number of transmitters and/or receivers 1719. In the same manner, a satellite phone 1716 may be linked to network 1730 via a satellite base station 1718 or the like. Again, what is important in this particular embodiment is that a user have access to main computing server 1720.

Any number of client systems 1710, 1712, 1714, or 1716 may optionally be linked or connectable to, for example, a printing or writing device 1735. In one example, writing device 1735 is used to write or encode information or data onto a storage medium, such as a chip embedded within a smart card. As another example, the storage medium may be a floppy disk or a magnetic strip located on a credit card. With portable wireless devices, the data or information may be stored directly in, for example, a hard disk drive or the like. With these PDAs, additional information may also be transmitted for storage thereon. For example, with reserved seating events, a row and section number for the reserved seats may be stored in the account as well. Thus, the seating information may be transmitted, for example, at redemption. As yet another example, the information may be coded or written onto a piece of paper forming, for example, a ticket, certificate, or receipt. With this example, the information may be encoded in a numeric code or bar code or any other similar data capable of being read by a standard bar code reader or other similar device.

Advantageously, in accordance with another embodiment, the writing device may be incorporated in a portable and/or wireless device, such as a Palm VII, computer, or the like. In this embodiment, the identification may be unique to the user and/or specific event. Thus, the device receives the ticket and stores it therein. In addition, the ticket optionally includes a unique portion or component corresponding to a unique seating arrangement for reserved seating, such as at sporting events, and/or optionally another unique portion corresponding to concession and/or other purchases.

With the architecture depicted in FIG. 17, the interconnected communications systems may exchange information using various services, such as electronic mail, Gopher, and/or the World Wide Web ("WWW"). These services allow each system including, for example, main computing server 1720 and client systems 1710, 1712, 1714, and 1716 to send information, including graphical Web pages, to one another and other remotely located systems, where the pages may then be displayed. Using the WWW as an example, each resource or web page of the WWW is uniquely identifiable by a Uniform Resource Locator (URL). To view a specific web page, a client system specifies the URL for that web page in, for example, a HyperText Transfer Protocol (HTTP) request. HTTP is one example

of an application protocol that provides users access to files using a standard page description language such as HyperText Markup Language (HTML) or Extensible Markup Language (XML). These languages provide a standard set of tags that define how a web page is to be displayed. When a user indicates to a browser implemented on, for example, client 1712, to display a web page, the browser sends a request to the server, in this case main computing server 1720, to transfer a document that defines the web page to the client. When the requested document is received by the client, the browser displays the web page as defined by the page description language. Typically, the document contains various tags that control the displaying of text, graphics, controls, and other features. The document may also contain the URLs of other web pages available on that particular server or on other server computing systems.

Although this example is described in the context of the Internet and the WWW, it is to be understood that the aspects of the present invention may be implemented utilizing other similar architectures and environments. For example, the concepts of the present invention may be implemented in an electronic mail environment where data and information or requests are transmitted in electronic mail messages between the client systems and the main computing system.

In the context of provisioning movie theatre tickets, main computing server 1720 may be accessed by remotely located users to advantageously allow the purchase of, for example, movie tickets. Similarly, main computing server 1720 is also utilizable for the purchase of concessions and other movie related merchandise. Furthermore, main computing server 1720 may advantageously be used to collect theatre patron demographic data for marketing use. As yet another example, server 1720 is capable of disseminating movie-related information as a service to theatre patrons and of providing advertising service to third party sponsors. In still yet other embodiments, main computing server 1720 may be used to facilitate an initialization process after which a user account is generated for each theatre patron. In these embodiments, each patron utilizes some sort of identification device, such as, for instance, a smart card having a machine readable identifier for uniquely identifying the user to redeem purchases. In other embodiments, an identification device already in the possession of the user is associated with an account during the initialization process. Advantageously, an identifier is used to associate the user and the identification device with a corresponding account. Of course, the identification device may take many forms. For instance, it may include a smart card or credit card, or even a PDA or wireless phone with the identifier written to memory, and/or any other analogous devices. The device optionally stores the ticket thereon which is optionally unique to a specific event, and optionally includes a component for specific seating, concession, and/or other unique customer information/preferences.

According to the principles of the present invention, main computing server 1720 allows a remotely located user to check on movie times, seating availability, and other information, such as the movies being shown at a particular theatre, the address and/or directions to the theatre and other related information. In addition, a user may utilize main computing server 1720 to purchase tickets,
5 concessions, and/or other merchandise as well. To purchase a ticket or other merchandise, the user conducts a credit card transaction or other similar secure transaction utilizing for example, an Internet credit/debit service, or the like. Then, the information concerning the purchase is transmitted to the theatre. To illustrate, after the purchase of a movie ticket, main computing server 1720 updates an account associated with the user which may be located locally, at the theatre server, or at another
10 remote location or server altogether. Alternatively, main computing server 1720 may authorize printing of a ticket containing an identification code at the user's client server or optionally the encoding of ticket or account information onto, for example, a memory medium located in or on the user's smart card, PDA, or other portable device. The user's account then is accessible at a point of sale upon presentation of the identification device. Hence, the user gains admission to an event only after a movie
15 attendant verifies the purchase of a ticket, which occurs when the attendant accesses the user's account using the identifier stored on the identification device presented by the user.

Using the smart card as an example, while at the entrance of a theatre, a user may gain admission to the movie by first presenting or motioning the smart card within the reading or
20 transmission range of a reader. Subsequently, the reader reads the identifier embedded in the smart card, accesses the user's account and determines whether a ticket purchase has in fact been made by the user. This information is then transmitted to the theatre attendant who either admits or turns away the user based on this account information.

Also in some embodiments, additional information may be stored and transmitted to a user or theatre attendant. For example, in reserved seating venues, a section and seat number may also be stored in the user's account. In these embodiments, after accessing the account, whether it is stored on the user's identification device or on the theatre server, the seating information may be printed onto a physical receipt. Printing may be effected by a point of sale printer or by the user's device (assuming
30 that the device possesses printing capability). The physical receipt advantageously provides the user with evidence of purchase and may be used for entrance into particular sections, readmission into a section, or to oust other customers from the user's seat.

Although in this and other embodiments of the invention, reference is made to an attendant who
35 verifies and admits or denies admission to the user, it is also possible within the scope of the invention to use some type of automated device in place of the attendant. For example, it is possible that the

theatre attendant may be replaced with a reader and optional turnstile. In this case, the user could motion the smart card within the reading range of the reader after which the turnstile would admit the user only if a purchase has been made, or an alarm may occur to indicate that an improper entry attempt has occurred. Similarly, a concession or merchandise stand could be replaced with a reader and a candy machine-like vending device. In this case, the user could motion or insert the identification device into a reading slot after which any purchased items would be dispensed. Thus, reference to an attendant is for convenience and exemplary purposes only, and it is to be understood that the invention is intended to cover other alternatives as well. Similarly, the attendant may have access to a ticket printing device to print out a receipt, specific movie information, specialty program information, reserved seat assignments, concessions information, and the like.

Of course, the user may also purchase concessions and/or merchandise, such as clothing, movie soundtracks, toys, posters, videos, and the like in a manner similar to that described above as well. These items may then be picked up at the theatre during the event or, with merchandise, mailed to the user's home. Specifically, concession purchases follow similar procedures as the movie ticket purchases. The user collects the pre-purchased concession items and presents an identification device (e.g., a bar coded ticket, smart card, and/or other device) to the attendant at the register. Scanning the device expedites the lines by optionally eliminating the exchange of money if pre-paying for concessions and the need to enter each item into the register. As the purchase decision has already been made, that too will create a more efficient operation. Additionally, concessions may optionally be sold in "Value Packs." For example, users may be able to purchase a large soft drink, large popcorn, and a box of candy at a reduced price. "Frequent flier" purchases and bonus points may be offered as well. With merchandise, the present invention provides access to convenient, 24-hour purchases and advanced purchases. Furthermore, since purchases are made online, the product does not have to be in stock at the time of the purchase.

Optionally, the theatre, for example, may also include readers/scanners at each row or seat in the theatre. In this embodiment, the customer enters the theatre via, for example, the POS and optional auto-attendant card scanner/reader, and proceeds to sit down in the appropriate seat. At the row or seat, the customer has his or her card scanned/read and the concession stand is alerted to the fact that the user is ready to receive any pre-paid orders. Alternatively, a user can order concessions using, for example, a wireless device, even in the theatre, and have the concession provided to the seat without waiting in line. The above embodiment is also applicable to reserved seating embodiments such as sporting events. In these embodiments, the user need not check-in at the seating location. Instead, when the user enters the reserved seating event via the POS, the POS directly notifies concessions with the user

seat location stored in the system. Subsequently, the pre-purchased items may be delivered to the user's reserved seat.

Main computing server 1720 may also provide movie information using, for example, Oracle's Customer Relationship Management software products. For example, any of the following information may be provided: theatre location, descriptions, listings of the actors in the movie, a summary of the plot, movie time, a movie rating, any selected reviews, a running time, the director, and listings or groupings of movies by genre, and other similar information.

Marketing techniques may also be facilitated by server 1720. For instance, the present invention may offer advertising, via for instance main computing server 1720, to movie studios, movie theatres, concession manufacturers, and other companies. As an example, a special entertainment theme area may be created for each sponsor including customized logos placed on various pages, contests, and/or games or sweepstakes designed to generate an electronic mailing list of entrants. Similarly, main computing server 1720 may be utilized to develop, design, program, host, maintain, promote and fulfill customized events for sponsors and provide lists of the users' email addresses. Furthermore, main computing server 1720 may be used to provide updates on the week's new films and videos. Additionally, main computing server 1720 may contain its own advertisements or advertisements from other sponsors.

Main computing server 1720 may be used to gather and store user demographic data during an initialization or initiation process. This data may include; for example, customer/user name, age, income, address, movie preferences, theatre preferences, time preferences, zip code, movie interests, prior purchases, and may, in turn, be used by movie sponsors during subsequent marketing campaigns. Having each prospective user register demographic information on main computing server 1720, program sponsors may deploy this knowledge throughout the business to enable: user focused planning and decision making; user knowledge based marketing; and intelligent, real time interaction with users at every contact point. Furthermore, the present invention may provide the following benefits: increased sales revenue and profit; more precise demand forecasts; improved customer retention, satisfaction and loyalty; new market/opportunity identification for business growth; rapid, centralized tracking and measurement of marketing ROI; enables a capital budget approach to marketing investments; flexibility to respond to rapidly changing marketing conditions; and improved customer service.

In a related fashion, server 1720 may be used to proactively transmit advertisements via, for example, an electronic mail message, concerning movies to a targeted user based on the user's

previously entered preferences. More specifically, main computing server 1720 may be utilized to transmit a personalized email to users touting special films at local theatres based on previous movie ticket purchases. For example, if a film is entering the latter stages of its engagement and sales are lagging, the present invention may be utilized to send a personalized email message to someone who has purchased tickets for similar types of movies before and offer them an incentive to attend the screening. In addition, the identification device may also have advertisements, logos, and/or corporate sponsors, and other similar information printed on one or more surfaces.

Although in this embodiment, main computing server 1720 is described in the context of movie theatre ticket sales, it is to be understood that the concepts of the present invention are applicable to other environments as well. For instance, it is to be understood that the scope of the present invention is intended to cover other industries such as the sales of sporting event tickets in sports venues, music concerts, museums, or any other event where it may be advantageous to allow a user to purchase tickets or other items remotely. In this embodiment, the specific reserved seating information, and other customized information such as concessions, customer preferences, parking, and the like, may be stored on a wireless device (or remote account) and associated with a component of the ticket transferred to the wireless device and/or may be printed on a ticket for use during the event by the identification device or by an attendant at using a point of sale device. Additionally, other alternative or simultaneous arrangements may also be used that utilize this customized information.

To facilitate the above and other functions, main computing server 1720 implements, for example, one or more computing processes and a number of local and/or remote databases, or one or more computers or computing systems. Main computing server 1720 is advantageously linked to or connected with any number of point of sale (POS) servers 1744 and/or ticket and theatre servers 1746 located at or accessible by, for example, the theatre itself. These POS servers 1744 are located at each theatre. In contrast, theatre server 1746 may exist as a single server or as multiple servers with one or more located at each theatre. In accordance with the principles of the present invention, POS servers 1744 and/or theatre servers 1746 are linked to a number of readers 1740. These components, along with any other optional elements, collectively comprise the theatre computing system.

The theatre computing system, like main computing server 1720 implements any number of computing processes or programs and databases, either local or remote, necessary to facilitate the concepts of the present invention. In one embodiment, integration between the theatre computing system and main computing server 1720 occurs on three different levels. The first includes a physical connection between main computing server 1720 and the theatre computing system. This is accomplished by employing, for example and as discussed above, a T1 line, utilizing the Internet as a

virtual private network. The second consists of, for example, a network connection using a TCP/IP Internet protocol. This network connection is secure with firewalls in place. The third consists of, for example, an Application Programming Interface. This software may be a custom piece of software built from the ground up for each theatre chain. In one example, either or both of POS server 1744 and/or theatre server 1746 serve as a gateway or entrance to the corresponding theatre computing system. Furthermore, firewall 1750 separates main computing server 1720 from the theatre computing system to facilitate secure communications.

In accordance with the principles of the present invention, the theatre computing system, like main computing server 1720, may be used to store theatre patron or user accounts. In particular, each account is associated with a user via an identifier and is used to facilitate admission of the theatre patrons. More specifically, after a user purchases a ticket, the user's account is updated. Then before gaining admission to a movie or before redeeming any merchandise, the account may be verified at the theatre utilizing, for example, an identification device presented by the user.

According to the concepts of the present invention, either main computing server 1720, theatre system, or both keep track of tickets and/or merchandise sold. Similarly, the information may alternatively or additionally be stored within the memory of a user's identification device.

The theatre computing system performs other functions as well. For instance, the theatre computing system may be used to transmit information regarding seating availability, prices, types of concessions and merchandise, and the like to theatre customers. In addition, the theatre system may be advantageously used to manage and store information regarding the operation of the theatre. For instance, the theatre system advantageously monitors ticket sales including maintaining the number of seats available for purchase, and re-tabulating inventory after each sale, as well as other management functions associated with the day-to-day operation of a movie theatre such as maintaining merchandise inventories. Of course, in alternate embodiments, the above information and management functions may be performed by main computing server 1720 thereby easing the management burden placed on the theatre system.

According to the principles of the present invention, readers 1740, in one embodiment, include smart card readers. Of course other variations and alternatives are possible including bar code readers, infrared beam and microwave readers, credit card magnetic strip readers, biometrics scanning/capture devices such as retina or fingerprint scanners, and/or any other analogous devices. In one example, readers 1740 are located in various locations within the theatre itself including, for instance, building entrances, concessions and/or merchandise stands, or other provisioning stations, and the like. As

mentioned above, readers 1740 are connected to and in communication with POS server 1744 and/or ticket/theatre server 1746, via a data communication network, including, for example, a hardwired LAN, or a wireless network utilizing any number of transceivers and/or receivers or the like. In accordance with the principles of the present invention, readers 1740 are used to read and identify each user as he or she attempts to gain admission to the theatre. In this regard, as described above, after presentation of an identification device, reader 1740 reads an identifier stored on the device and subsequently accesses the account associated with the user as identified by the identifier. At that point, the theatre attendant may verify whether a ticket has been purchased by the user and admit or deny entrance to the user, accordingly.

Readers 1740 serve as part of a wireless LAN bar code scanning system which provides an interactive exchange of data from anywhere in the theatre, thereby ensuring that mission critical information is visible, available and accessible while the movie theatre is selling tickets. In this embodiment, a network controller, or NCU, is created which may take the form of hardware or software and acts as a gateway between the host computer and other components of the Radio Frequency system. Gateways optimize the performance of systems with high terminal counts, network monitoring and diagnostics, screen formatting, and keyboard mapping. In addition, the NCU is available as a fault-resilient system, eliminating downtime and risk to critical theatre operations.

Also in this embodiment, multiple transceivers, or access points, are established in each theatre depending upon the physical size of the theatre. These transceivers and access points act as base stations that pass communications between the network controller (or host) and Radio Frequency terminals. Transceivers are used in UHF and 902-928 MHz systems, in which they receive and route messages from terminals to the network controller. These bases also transmit messages, such as instructions, back from the host to the wireless devices. Access points, typically used in 2.4 GHz installations, are wired directly to an Ethernet or Token Ring backbone, and provide transparent access between the wired LAN and an unlimited number of wireless devices which are, in turn, used by theatre employees.

The theatre employees assigned to operate readers 1740 are equipped with, for example, a Wireless Spectrum 24 device. This device automatically downloads ticket information into the access points on a real time basis. In this example, an indicator light is used to identify invalid tickets. Each access point, which is connected to the wired LAN backbone, executes a unique hopping pattern across, for example, 78 non-overlapping frequencies. The table of 66 hopping patterns specified in the IEEE 802.11 standard minimizes the probability that one cell operates on the same frequency at the same time

as another cell. This allows the access points to operate at 2Mbps without interruption-even in close proximity to one another.

Another example of an architecture utilizable for implementing the features of the present invention is depicted in FIG. 18. In this embodiment, client systems 1810, 1812, 1814, and 1816, communications network 1830, private network 1834, cable modems 1811, transmitters and/or receivers 1819, and central office or communications center 1818 are similar to the corresponding components shown in FIG. 17, and thus are not described again. Advantageously, in the embodiment of FIG. 18, POS theatre server 1844 and readers 1846 are individually connected to network 1830 and to one another. In addition, each are protected by firewalls 1850a and 1850b respectively. As a result, a user may directly access either POS theatre server 1844 or reader 1846 via network 1830.

In this embodiment, management responsibilities and functions are advantageously passed onto POS server 1844 and readers 1846. Thus, either or both of POS server 1844 and/or readers 1846 are responsible for initializing and maintaining user accounts, provisioning tickets, maintaining seat and merchandise inventory, storing survey data, and/or any other similar functions. Similarly, in this embodiment, any or all of the functions of the main computing server of the embodiment of FIG. 17 are performed by either or both of POS server 1844 and/or readers 1846. Thus, either or both of POS server 1844 and/or readers 1846 may be adapted to perform the online sales of merchandise and concessions, advertising (including customized e-mails), information management, and/or initialization functions of the present invention.

This embodiment may be used in addition to or in conjunction with the main computing server of FIG. 17 to result in a fault tolerant system. Thus, if main computing server 1720 were to fail, processing could continue without any disruption to system users.

In accordance with the principles of the present invention, one example of an initialization process is illustrated in FIGS. 19a – 19b. To commence the initialization or activation process (step 1900), a user utilizes any of client systems 1710, 1712, 1714, or 1716, to log on to or establish a connection with network 1730 (step 1904) and subsequently connect to main computing server 1720 (step 1908). After establishing a connection, main computing server 1720 displays various pieces of information including, for example, instructions directing new users to enter a randomly assigned new user identifier and/or password. Following these instructions, the user enters subscriber information including, for instance, the identifier and/or password (step 1912). The identifier is then checked for validity (step 1916). If the validity check indicates that the user is a repeat user, processing continues with a purchase routine (step 1920), several examples of which are described in greater detail below.

On the other hand, if the validity check indicates that the user is not a repeat subscriber, processing continues with a prompt asking whether the user wishes to become a subscriber (step 1924). A negative response terminates processing (step 1928). If however the user indicates that he or she
5 wishes to subscribe, a registration form is transmitted for completion by the user (step 1932). To complete the form, the user includes information such as the user's name, address, phone number, social security number, and/or other similar data (step 1936). Additionally, the form may also include survey information utilizable for marketing purposes and/or other demographics including age, sex,
10 number of children, genre preferences, time preferences, the amount of money spent on movies in a month, and/or other similar survey questions.

In addition to including the above information, the user also includes payment information. This information typically includes credit card information, but may also include information pertaining to other alternative payment methods, such as Internet credit services, establishing a credit account
15 directly with the system sponsor, or other similar plans. Although in this embodiment an electronic registration form is forwarded to the user's client system, it is possible to mail or fax a hard copy as well. As with all other embodiments and processing routines, advertisements by the system sponsor as well as other parties may be displayed at any time during processing.

20 After filling out the registration form (step 1936), processing continues with a purchase routine. As an example of such routine, the user initially selects a theatre (step 1940). This is followed by displaying a list of movies showing at the theatre selected by the user (step 1944). After selecting a movie (step 1948), the theatre system checks for seating availability (step 1952). Subsequently, a check is performed by, for example, main computing server 1720 to ensure that the user's payment is valid
25 (step 1956). If the payment is not valid, processing either starts over or ends (step 1928). Otherwise, an account is initialized or activated on behalf of the user followed by confirmation of the user's purchase (step 1964). This confirmation is made, in one embodiment, by mailing to the user a receipt or a smart card having an identifier stored in memory. In other embodiments, some other device, such as a PDA, may be sent to the user. Similarly, a confirmation code or other identifier may be transmitted and
30 written to a memory medium already in the possession of the user, assuming writing capability is possessed by the user's client system and/or device or wireless device. For instance, the medium may be a piece of paper, a magnetic strip, or a memory chip embedded in a smart card. In still other embodiments, the confirmation may include a password or confirmation number or may be omitted. In this latter case, the user's identity and/or name is stored in, for example, main computing server 1720
35 for confirmation purposes, as will be described in greater detail below.

After confirmation (step 1964), the user brings the receipt or confirmation to, for example, the theatre (step 1968 in FIG. 19b). There, after verifying activation of the user's account, the theatre issues a smart card with an identifier written or encoded in memory (step 1974). In embodiments utilizing a confirmation code or the like, the code is read or presented to, for example, an attendant for verification. In other embodiments, a valid form of identification such as a driver's license is presented to the attendant. Whatever the case may be, the attendant then uses the confirmation and accesses main computing server 1720 to verify that the user has indeed activated his or her account. Also at that time, or shortly after payment is confirmed, each of the servers is updated. For example, theatre server 1746 is updated with a confirmation and any purchase information (step 1976). Additionally, main computing server 1720 is also concurrently updated (step 1980). After all of the servers have been updated, processing ends (step 1984). Alternatively, the servers need not be updated immediately, and optionally only one of the servers and/or an entrance device or reader need be updated.

As mentioned above, other initialization procedures are also possible within the concepts of the present invention. As another example, FIG. 20 depicts an embodiment suitable for mass mail marketing campaigns. Specifically, processing commences (step 2000) with the mass mailing of advertisements (step 2004) which are subsequently received by the users (step 2008). The advertisements may include actual paper mailings, or facsimile transmissions or electronic advertisements. The advertisement preferably contains information regarding the service as well as instructions for connecting to main computing server 1720. After receiving the advertisement, the user logs on to main computing server 1720 in accordance with the instructions or directions included with the advertisement (step 2012). Following the advertisement's instructions, the user enters a code that indicates that the user is a new subscriber (step 2016). Next, main computing server 1720 confirms that the user wishes to subscribe (step 2020). If the user does not wish to subscribe (step 2024), the initialization routine terminates (step 2028). If the user wishes to subscribe, main computing server 1720 obtains, for example, basic information such as payment information and any other information not already known by the sponsor including movie preferences and/or other similar information (step 2026). In addition, main computing server 1720 also optionally prompts the user for a movie selection (step 2026).

After receiving a movie selection, main computing server 1720 attempts to schedule the movie (step 2032). As discussed above, main computing server 1720 checks for seating availability and other similar information stored either locally, remotely in the theatre system, or in some other remotely located database. Subsequently, whether or not the user was successful in scheduling a movie, a unique identifier is assigned to the user. In addition to being associated with the user, the identifier is also associated with an identification device, such as a smart card (step 2036). Similar to the above

embodiment, an account and identifier are generated and activated for the user at main computing server 1720 and such information is optionally forwarded to ticket/theatre server 1746 (step 2040). Furthermore, if the user was successful in scheduling a movie, the account is updated to indicate that a ticket has been purchased. If the user was not successful in scheduling a movie, the identifier and
5 account are generated for use with later purchases.

Subsequently, ticket server 1746 and/or main computing server 1720 transmit this information to POS servers 1740 so that the user's account may be established or updated (step 2044). In some
10 embodiments, this information is transmitted to POS servers 1740 only if a ticket is successfully purchased. In other cases, the information is always transmitted. Of course, the information to be stored in the accounts is not limited to tickets. For example, any concession or merchandise information is also transmitted.

Once all desired purchases have been completed (step 2048), the identification device is sent to
15 (step 2052) and subsequently received by the user (step 2056). After receipt by the user, the process ends (step 2028). As discussed above, the device may be a smart card with the identifier stored in an embedded chip, a physical paper ticket, or an electronic message with an identification code, and/or any other similar device. Furthermore, instead of mailing or electronically transmitting the device to the user, the device may also be picked up at the theatre or some other location. Once again, in addition to
20 storing the information in an account located on the computing servers, this information may also be stored in the memory of the identification devices.

In addition to the examples discussed above, yet another initialization procedure is described with reference to FIG. 21. As with the embodiment of FIG. 20, this example is also suitable for mass
25 mail marketing campaigns. More specifically, processing again commences (step 2100) with a mass mailing to a number of potential users or customers (step 2104). In this embodiment, the mass mailing includes the physical mailing of smart cards and/or other similar devices. Each device, as with the above embodiments, optionally includes or is assigned one or more identifiers which may later be associated with the user. Of course, other alternatives may be used such as assigning or transmitting the
30 device an identifier in real-time associated with a specific individual event, time, location, and/or other information. The list of potential users may be gathered through a marketing campaign, a survey, or even selected at random. Whatever the case, one or more users subsequently receive the smart card or other identification device (step 2108) via, for example, mail service. As yet another alternative, the device may be passed out at a store location, or the like.

Included with the identification device are information and instructions regarding the service as well as directions for connecting to main computing server 1720. After receiving these instructions and the identification device, the user logs on to main computing server 1720 (step 2112). Also pursuant to the advertisement's instructions, the user enters a code that indicates that the user is a new subscriber
5 (step 2116). Next, after prompting the user to subscribe (step 2120) main computing server 1720 confirms that the user wishes to subscribe (step 2124). If the user does not wish to subscribe, the initialization routine terminates (step 2128). On the other hand, if the user wishes to subscribe, main computing server 1720 obtains, for example, basic information such as payment information and/or any other information not already known by the sponsor including movie preferences and other similar
10 information (step 2132). In addition, main computing server 1720 also optionally prompts the user for a movie selection at this time (step 2132).

After receiving a movie selection, main computing server 1720 attempts to schedule the movie (step 2136). As discussed above, main computing server 1720 checks for seating availability and other
15 similar information stored either locally, remotely in the theatre systems, or in some other remotely located database. Subsequently, the user is associated with the unique identifier previously assigned to the identification device received by the user.

After associating the user with an identifier, the account and identifier are forwarded to
20 ticket/theatre server 1746 (step 2140). Furthermore, if the user was successful in scheduling a movie, the account is updated to indicate the purchase of a ticket. If the user was not successful in scheduling a movie, the identifier and account are generated for use with later purchases.

Subsequently, ticket server 1746 and/or main computing server 1720 transmit this information
25 to POS servers 1740 so that the user's account may be activated or updated (step 2144). In some embodiments, this information is transmitted to POS servers 1740 only if a ticket was successfully purchased. In other cases, the information is always transmitted. Once all desired purchases have been completed, an optional transaction to debit the customer's account may be performed (step 2148). From there, the user may utilize the identification device to gain admission to the theatre or other
30 similar events (step 2152).

Another example of an initialization process utilizable in conjunction with, for example, wireless or Bluetooth enabled devices, is illustrated in FIGS. 22a – 22b. To commence the initialization or activation process (step 2200), a user utilizes, for example, a wireless or Bluetooth enabled client
35 system to log on to or establish a connection with network 1730 and main computing server 1720 (step 2204). After establishing a connection, main computing server 1720 transmits to the user's wireless or

Bluetooth enabled device information, which includes, for example, instructions directing new users to enter a randomly assigned or user-selected identifier and/or password. Subsequently, the user enters subscriber information including, for instance, the identifier and/or password with his or her wireless or Bluetooth enabled device (step 2208). The information is then checked to determine whether the user is
5 a repeat user (step 2212). If the check indicates that the user is a repeat user, processing continues with a purchase routine (step 2216).

On the other hand, if the validity check indicates that the user is not a repeat user, processing continues with a prompt asking whether the user wishes to subscribe (step 2220). A negative response
10 terminates processing (step 2224). However, if the user indicates that he or she wishes to subscribe, a registration form is transmitted to the user's wireless or Bluetooth enabled device (step 2228). To complete the form, the user includes information such as the user's name, address, phone number, social security number, payment information, and/or other similar data (step 2232). Additionally, the form may also include survey information utilizable for marketing purposes and/or other demographics
15 including age, sex, number of children, genre preferences, time preferences, the amount of money spent on movies in a month, and/or other similar survey questions.

After filling out the registration form, processing optionally continues with a purchase routine. For example, the user initially selects a theatre with his or her wireless or Bluetooth enabled device
20 (step 2236). This is followed by transmitting a list of movies showing at the theatre to the user's wireless or Bluetooth enabled device (step 2240). After selecting a movie (step 2244), the theatre system checks for seating availability (step 2248). Subsequently, a check may optionally be performed by, for example, main computing server 1720 to ensure that the user's method of payment is valid (step 2252). If the payment is not valid, processing either starts over or ends (N in step 2256). Otherwise, an
25 account is initiated or activated on behalf of the user followed by an optional confirmation of the user's purchase (step 2260). Upon activation, an identifier may be transmitted to the user's wireless or Bluetooth enabled device for use in accessing the user's account. Alternatively, as will be discussed below, the identifier may be determined by the user, or a previously generated identifier may be
utilized.

After activating the user's account, the identifier is written to memory of the user's wireless or Bluetooth enabled device (step 2264). In embodiments where the identifier is selected by the user, the identifier is transmitted to, for example, main computing server 1720, where it is associated with the user's account. Subsequently, the user brings his or her wireless or Bluetooth enabled device to the
35 theatre or other venue (step 2268). Then, to gain admittance into the theatre, the user beams or transmits the identifier to an attendant, who uses the identifier to access the user's account and verify

that the user has indeed purchased a ticket or service (step 2268). Also at that time, each of the servers is updated (steps 2272 and 2276). After all of the servers have been updated, processing ends (step 2224). Alternatively, the servers need not be updated immediately, and optionally only one of the servers and/or an entrance device or reader need be updated.

5

Other activation or initialization procedures are also possible within the concepts of the present invention. As another example, FIG. 23 depicts an embodiment suitable for use with mass mailing campaigns. Specifically, processing commences (step 2300) with the mass mailing of electronic advertisements (step 2304) received by the users' wireless or Bluetooth enabled devices (step 2308).

10 Each advertisement preferably contains information regarding the service as well as instructions for connecting to main computing server 1720. After receiving the advertisement, the user logs on to main computing server 1720 with his or her wireless or Bluetooth enabled device (step 2312). From there, the user enters a code that indicates that the user is a new subscriber (step 2316). In response, main computing server 1720 prompts the user to subscribe (step 2320). After confirming that the user wishes
15 to subscribe (step 2324), main computing server 1720 obtains, for example, basic information such as payment information and any other information not already known by the sponsor including movie preferences and/or other similar information from the user (step 2232). After receiving the above information, an account is generated on behalf of the user. In addition, main computing server 1720 also optionally prompts the user for a movie selection. Returning to step 2324, if the user does not wish
20 to subscribe, the initialization routine terminates (step 1628).

After receiving a movie selection, main computing server 1720 attempts to schedule the movie (step 2336). As discussed above, main computing server 1720 checks for seating availability and other similar information stored either locally, remotely in the theatre system, or in some other remotely
25 located database. Also, a unique identifier is assigned to the user (step 2340). Subsequently, the account and identifier are optionally forwarded to ticket/theatre server 1746 (step 2344) or any POS servers (step 2348). Furthermore, if the user was successful in scheduling a movie, the account is updated to indicate that a ticket has been purchased. If the user was not successful in scheduling a movie, the identifier and account are generated for use with later purchases.

30

Alternatively, the user may select an identifier or utilize a preexisting identifier. In this case, the identifier is transmitted from the user's wireless or Bluetooth enabled device to main computing server 1720. If an identifier is generated by main computing server 1720, the identifier is transmitted to the user's wireless or Bluetooth enabled device (step 2352), where it may be written to memory (step
35 2356). In either case, this identifier is associated with the account generated on behalf of the user. Once all desired purchases have been completed and after the user's account and identifier have been

generated, processing ends (step 2328). Then, as with the example of FIG 22, the user's wireless or Bluetooth enabled device may be utilized as an identification device to gain admittance into a theatre or other venue.

5 In addition to the examples discussed above, yet another initialization procedure is described with reference to FIG. 24. As with the embodiment of FIG. 23, this example is also suitable for mass mail marketing campaigns. More specifically, processing again commences (step 2400) with a mass mailing to a number of potential users or customers (step 2404). In this embodiment, the mass mailing includes the physical mailing of wireless or Bluetooth enabled devices directly to the potential
10 customers. Each device optionally includes or is assigned one or more identifiers which may later be associated with the user. Of course, other alternatives may be used such as assigning or transmitting the device an identifier in real-time associated with a specific individual event, time, location, and/or other information. As an alternative to mailing the devices, the devices may be passed out at a store location, or purchased by the users.

15 Included with the identification device are information and instructions regarding the service as well as directions for connecting to main computing server 1720. After receiving these instructions and the identification device, the user logs on to main computing server 1720 using the wireless or Bluetooth enabled device (step 2408). The user enters a code that indicates that the user is a new
20 subscriber. After determining that the user is a new customer, the user is prompted to subscribe (step 2416). Main computing server 1720 then confirms that the user wishes to subscribe (step 2420). If the user does not wish to subscribe, the initialization routine terminates (step 2424). On the other hand, if the user wishes to subscribe, main computing server 1720 obtains, optionally, a movie selection and basic information such as payment information and/or any other information not already known by the
25 sponsor including movie preferences and other similar information (step 2428). As with the embodiment of FIG. 23, this information may be transmitted by the user from his or her wireless or Bluetooth enabled device.

30 After receiving a movie selection, main computing server 1720 attempts to schedule the movie (step 2432). Subsequently, an account is generated or activated and associated with the unique identifier previously assigned to the identification device received by the user (step 2436). Alternatively, the user may select an identifier, or one may be generated and transmitted to the wireless or Bluetooth enabled device and stored therein.

35 Subsequently, the account and identifier are forwarded to ticket/theatre server 1746 (step 2440). Furthermore, if the user was successful in scheduling a movie, the account is updated to indicate the

purchase of a ticket. If the user was not successful in scheduling a movie, the identifier and account are generated for use with later purchases. In addition, an optional transaction to debit the customer's account may be performed (step 2444). From there, the user may utilize the identification device to gain admission to the theatre or other similar events.

5

Another example of an initialization process is illustrated in FIGS. 25a – 25b. To commence the initialization or activation process (step 2500), a user utilizes any of client systems 1710, 1712, 1714, or 1716, to log on to or establish a connection with network 1730 and main computing server 1720 (step 2504). After establishing a connection, main computing server 1720 displays various pieces of information including, for example, instructions directing new users to enter a randomly assigned new user identifier and/or password. Following these instructions, the user enters subscriber information including, for instance, the identifier and/or password (step 2512). The identifier is then checked for validity (step 2512). If the validity check indicates that the user is a repeat user, processing continues with a purchase routine (step 2516).

15

On the other hand, if the validity check indicates that the user is not a repeat subscriber, processing continues with a prompt asking whether the user wishes to become a subscriber (step 2520). A negative response terminates processing (step 2564). If however the user indicates that he or she wishes to subscribe, a registration form is transmitted for completion by the user (step 2524). To complete the form, the user includes information such as the user's name, address, phone number, social security number, payment information, and/or other similar data (step 2528). In addition, the user also includes biometrics information to be associated with an account and for use as an identifier. In some cases the biometrics information may have previously been scanned by a capture device and stored in the user's client system. In other cases, the user's biometrics information may be captured at a later time, for instance, during the user's first visit to the theatre or venue. As will be discussed below, any physiological or behavioral aspects of the human body may be used as the biometrics information. For example, finger or thumb prints, iris or retina images, electronic signatures, voice or facial scans, hand scans, and or any other similar features may be utilized. The biometrics information may be captured at the user's client system or at some other location and stored onto a memory medium and later transferred to the user's device.

30

After filling out the registration form (step 2528), processing continues with a purchase routine (step 2532). Assuming that the user's payment is valid, an account is initialized or activated on behalf of the user and associated with the user's biometrics information (step 2536). As will be discussed below, this account may then be accessed using the biometrics information to verify a ticket or other purchase. Subsequently, an optional confirmation may be transmitted to the user (step 2540).

35

After confirmation, main computing server 1720, and optionally any theatre or POS servers, are updated to reflect activation of the user's account and/or any purchases (step 2544). To redeem his or her purchases, the user arrives at the theatre (step 2548), where his or her biometrics information is scanned by, for example, an attendant (step 2552). After scanning, the user's account is accessed and any purchases are verified (step 2556). If purchases are redeemed, each of the servers are updated (step 2560) before finishing processing (step 2564).

As another example of a biometrics initialization or activation process, FIG. 26 depicts an embodiment suitable for mass mail marketing campaigns. Specifically, processing commences (step 2600) with the mass mailing of advertisements (step 2604) which are subsequently received by the users (step 2608). The advertisements may include actual paper mailings, or facsimile transmissions or electronic advertisements. Each advertisement preferably contains information regarding the service as well as instructions for connecting to main computing server 1720. After receiving the advertisement, the user logs on to main computing server 1720 in accordance with the instructions or directions included with the advertisement (step 2612). Following these instructions, the user enters a code that indicates that the user is a new subscriber (step 2616). Next, main computing server 1720 confirms that the user wishes to subscribe (step 2624). If the user does not wish to subscribe, the initialization routine terminates (step 2660). If the user wishes to subscribe, main computing server 1720 obtains, for example, basic information, a movie selection, and other data such as payment information and any other information not already known by the sponsor including movie preferences and/or other similar information (step 2628). In addition, main computing server 1720 also obtains biometrics information from the user. As mentioned above, this information may have been previously captured and stored onto the user's system or, in the alternative, may be captured at a later time, for instance during the user's first visit to the theatre.

After receiving a movie selection, main computing server 1720 attempts to schedule the movie (step 2632). As discussed above, main computing server 1720 checks for seating availability and other similar information stored either locally, remotely in the theatre system, or in some other remotely located database. Subsequently, an account is generated or activated on behalf of the user and associated with the user's biometrics information (step 2636). Furthermore, if the user was successful in scheduling a movie, the account is updated to indicate that a ticket has been purchased. Subsequently, ticket server 1746 and/or main computing server 1720 transmit this information to POS servers 1740 so that the user's account may be established or updated (step 2640).

With embodiments where the user's biometrics information is not captured until his or her first visit to the theatre, an account is initially generated without an identifier. Upon the user's first visit to the theatre, biometrics information may be captured and then associated with his or her previously generated account. In these cases, the user may be required to present a valid picture ID or the like in order to proceed with the biometrics capture routine.

Once all desired purchases have been completed, a confirmation may optionally be sent to the user (step 2644). To redeem his or her purchases, the user arrives at the theatre (step 2648), where his or her biometrics information is scanned by, for example, an attendant (step 2652). After scanning, the user's account is accessed and any purchases are verified. If purchases are redeemed, each of the servers are updated (step 2556) before finishing processing (step 2660).

One example of a purchase routine used to purchase tickets or other items or services is described with reference to FIG. 27. This routine may be used after initializing an account as described above or in conjunction therewith. To commence processing (step 2700), utilizing any of client systems 1710, 1712, 1714, or 1716, a user logs on to or establishes a connection to network 1730 (step 2704) and connects to main computing server 1720 (step 2708). The user may connect to server 1720 via the Internet, a private dial-up connection, or any other suitable means. After establishing a connection to main computing server 1720, the user enters subscriber information including, for instance, an identifier and/or a password (step 2712). This information is entered to facilitate secure communication between the user and main computing server 1720 by preventing third parties from accessing the user's account. In addition, the information may be used to identify repeat users as well as first time users. As such, before processing can continue, the identifier is checked for validity (step 2714). In one embodiment, main computing server 1720 checks to see whether the identifier/information has been entered before. If the information has not been previously entered, main computing server 1720 prompts or asks the user whether he or she wishes to subscribe (step 2722). If the user wishes to subscribe, processing proceeds with a new subscriber or initialization routine (step 2726). On the other hand, if the user does not wish to subscribe, processing ends (step 2730).

If the validity check (step 2714) indicates that the user is not a first time user, processing continues, optionally, with the establishment of a connection to ticket/theatre server 1746 (step 2734). From there, the user interactively enters a number of requests including, for example, a particular movie or a conveniently located theatre, or any other analogous request. In the embodiment depicted in FIG. 27, a list of movie theatres is displayed (step 2738) and the user is prompted to select a particular theatre (step 2742). Of course other processing routines are possible. For instance, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the desired movie

is displayed. Likewise, it is also possible to prompt the user for a desired theatre in response to which a listing of movies showing in the selected theatre is displayed. Other routines are similarly possible.

Returning to the example of FIG. 27, after selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 2746) for selection by the user (step 2750). Likewise, a listing of concessions may also be displayed now or at some other point in processing. Similarly, at any time during processing a listing of merchandise and/or advertisements may be displayed. Additionally, the user may, at any time, opt into or enter a concessions or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information. For instance, before making a movie selection, the user may wish to read a critic's review or check the rating of the movie and purchase beverages. Likewise, the user may wish to find out where the theatre is located and determine the ticket prices and seating availability.

After selecting a movie title (step 2750), the main computing server or the theatre system (either or both of POS server 1744 and ticket/theatre server 1746) check to see whether the desired number of seats is available (step 2754). If the desired number of seats is not available, indication is so made and the user is prompted for another selection. However, if the desired number of seats is available, the user is, optionally, prompted for any additional movie and/or concession/merchandise selections or purchases (step 2758).

Once all desired selections or purchases have been made, ticket server 1746 updates POS server 1744 by transmitting information identifying these purchases (step 2762). For example, if a user purchased four tickets along with popcorn and beverages, ticket server 1746 would transmit this information along with the user's identifier to a POS server 1744 located at the theatre selected by the user. The POS server 1744 would then access and update the user's account using the corresponding identifier. To gain admission to the theatre, the user merely presents his or her identification device to a theatre attendant. The attendant then verifies that purchases have indeed been made by reading the identification device at one of readers 1740. After reading the identification device, the attendant accesses the user's account and verifies ticket purchase before admitting or turning away the user. Alternatively, as suggested above, instead of or in addition to storing information in an account located on main computing server 1720, ticket/theatre server 1746, or POS server 1744, the account information can also be stored on the user's identification device by, for instance, writing the information to memory and/or directly stored on a device or wireless device having such capability. Similarly, the information can just as easily be embedded or encoded onto a disposable medium such as paper, in the form of a ticket or receipt.

After updating POS servers 1740, theatre/ticket server 1746 notifies main computing server 1720 that the user's account information has been updated (step 2766). At that point, the purchase routine is optionally completed by collecting payment information (step 2770). This information typically includes credit card information, but may also include information pertaining to other alternatives, such as utilizing or participating in an Internet credit service, establishing a credit account directly with the system sponsor, or other similar plans. After completing the purchase routine, processing ends (step 2730).

One example of a purchase routine utilizable in this embodiment is illustrated in FIG. 28. To commence the purchase routine (step 2800), a user utilizes any of client systems 1710, 1712, 1714, or 1716, to log on to or establish a connection with POS server 1744 (step 2804). As with any of the above embodiments, the user may connect to POS server 1744 via the Internet or any private dial-up connection. After establishing a connection to POS server 1744, the user enters subscriber information including, for instance, an identifier and/or a password. This information is entered to facilitate secure communication between the user and POS server 1744 by preventing third parties from accessing the user's account. Consequently, before processing can continue, the identifier is checked for validity (step 2808).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request. Furthermore, the interactive display also allows data to be collected from the user (step 2812). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In the embodiment depicted in FIG. 28, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 2816). Of course other processing routines are possible. For instance, as mentioned above, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the entered movie is displayed. Likewise, it is also possible to prompt the user for a desired movie genre in response to which a listing of movies falling into that genre is displayed. Other routines are similarly possible.

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 2820) for the user's selection (step 2824). If the user fails to make a selection, for example, because all of the seats in the theatre have already been sold, processing ends (step 2828). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 2832). Additionally, the user may, at any time, opt into or enter a concession or

merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

In this embodiment, once all desired selections have been made (step 2836), the user is optionally prompted for an additional or alternative identifier to be associated with the purchases (step 2840). The additional identifier may belong to the user, or it may belong to someone else. The identifier may alternatively be associated with an account or individuals within an account and include its own set of privileges/preferences. This feature is convenient for parents seeking to ensure that their children are spending money on movies and not other items, or to ensure that their children are viewing non-objectionable movies. In addition, this feature also provides tracking within an account as to the specific individuals that are utilizing the account in a specific manner or preference. Whatever the case may be, POS server 1744 waits until an identifier is received (step 2844) before closing the transaction by making payment arrangements (step 2848). Again, at any time, advertisements and other banners may be displayed (step 2852).

The routine continues, then, with POS server 1744 updating the account information at each reader 1746 (step 2856). Processing ends once updating is complete (step 2828). Once again, instead of or in addition to storing information in an account located on POS server 1744, and/or readers 1746, the account information can be stored on the user's device by, for instance, writing the information to memory.

One example of the process used to redeem a ticket purchased according to this embodiment is discussed with reference to FIG. 29. In this procedure, processing starts (step 2900) with the presentation of an identification device by the user to a movie theatre attendant (step 2904). Subsequently, the device is read by reader 1746 (step 2908). Using a smart card as an example, reading may be effected by moving or motioning the identification device into a reading range of reader 1746. In other cases, reading may be effected by sliding a magnetic strip over a reading device. Alternatively, the reading may include passing a ticket having a bar code encoded onto a surface under a bar code reader. As yet another alternative, reading may be effected by passing a paper ticket or receipt having a code printed on one surface to an attendant who then visually inspects the code and accesses an account using, for example, a computer located at the theatre.

Using the identifier read from the identification device, the attendant accesses the user's account to determine whether a ticket purchase has in fact been made by the user. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either

admitted or turned away. In particular, after reading the identifier, the identifier is checked for validity (step 2912). If the identifier is invalid, for example, because a ticket has not been purchased or because of an equipment failure, entry is denied (step 2916). Other possible reasons for invalidity could exist if the user has become delinquent with payments or because the account has never been activated.

5 Whatever the reason, the theatre attendant then optionally directs the user to customer assistance (step 2920) where another attendant or customer service representative can attempt to resolve the problem (step 2924). If entry is denied because the account has not been activated, the user may be asked to subscribe. Furthermore, also at this time, additional promotional incentives may be brought to the user's attention (step 2928). For instance, it may be possible to award the user bonus credits for subscribing at
10 that time. Additionally, the user may be given an opportunity to join a "frequent movie" club, where users are awarded bonus credits utilizable toward additional movies or merchandise based on the amount spent. Afterward, if the user has decided to subscribe he or she may return to the theatre entrance to recommence the admission process (step 2904), or if the problem was not able to be resolved, processing terminates (step 2932).

15 Returning to step 2912, if the identifier is valid, the user is admitted (step 2936). Then, if no other purchases have been made, the user proceeds to the theatre (step 2952). However, if the user has made additional purchases (step 2940), such as, for instance, merchandise or concessions, he or she is directed to a customer station where the items may be retrieved. At the station, the user presents the
20 identification device to an attendant who then accesses the user's account (step 2944). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 2948). From there, the user proceeds to the theatre (2952) and processing ends (step 2932).

FIG. 30 depicts a combined architecture and process diagram used to illustrate some of the
25 concepts of another embodiment of the invention. Initially, from a client system such as, for instance, a personal computer 3001, a user commences the process by transmitting a transaction request to POS theatre 3010 via network 3006 (steps 3004 and 3008). Included with the request, among other things, are the user's identification and information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. In conjunction with the user's request, POS theatre 3010
30 interactively responds to the user's inquiries, displays messages and advertisements, and finalizes the transaction by, for example, transmitting confirmation information (steps 3012 and 3016).

Subsequently, POS theatre 3010 updates the account information associated with the user. For example, POS theatre 3010 updates any local databases, as well as databases/accounts located at any
35 concession stands 3030 (step 3028) and/or readers 3022 (step 3020). Optionally, in response to the

POS theatre's transmissions, concession stand 3030 and reader 3022 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 3024 and 3032).

Shortly before show time, the user arrives at the theatre with identification device in hand. In this embodiment, the identification device includes a smart card 3046 with an identifier stored in a memory chip. To gain admission to the theatre, the user presents smart card 3046 to an attendant who then accesses the user's account (step 3036). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 3040). A similar procedure is used to obtain merchandise and concessions. Specifically, the user presents his or her smart card to an attendant at concession stand 3030 (step 3044). The smart card is read, the account is accessed, and products are delivered to the user in accordance with the user's account (step 3048). Furthermore, although POS theatre 3010, reader 3022, and concession stand 3030 are depicted as being separate elements, it is to be understood that in this and other embodiments they may also exist as a single component.

FIG. 31 depicts another purchase routine in which an electronic ticket is stored onto a user's identification device. To commence this purchase routine (step 3100), a user utilizes any of the above described client systems, to log on to or establish a connection with a POS server and/or directly to the POS (step 3104). As with the above embodiments, after establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password. The identifier is then checked for validity (step 3108).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request and to allow data to be collected from the user (step 3112). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In the embodiment depicted in FIG. 31, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 3116). Of course other processing routines are possible. For instance, as mentioned above, it is possible to prompt the user for a desired movie in response to which a listing of theatres showing the entered movie is displayed. Other routines are similarly possible.

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 3120) for the user's selection (step 3124). If the user fails to make a selection, processing ends (step 3128). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 3132). Additionally, the user may, at any time, opt into or

enter a concession or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

5 Once all desired selections have been made (step 3136), an electronic ticket (e-ticket) is transmitted to the user (step 3140). The electronic ticket preferably is encrypted or includes some sort of watermark to ensure originality and to prevent counterfeits. The e-ticket is then stored onto the user's identification device or smart card, using a writing device or the like (step 3144). Again, as mentioned above, advertisements may be displayed at any time, including during the closing transaction
10 where payment information is forwarded to the POS server (step 3152). The routine continues, then, with POS server optionally updating the account information at each reader (step 3156). Processing ends, once updating is complete (step 3128).

 One example of a process used to redeem a ticket is discussed with reference to FIG. 32. In
15 this procedure, processing starts (step 3200) with the presentation of the smart card by the user to a movie theatre attendant (step 3204). Subsequently, the card is read by a reader (step 3208). Reading may be effected by, for example, motioning the card within a reading range of the reader. By reading the card, account information is transmitted from the card to the reader and/or POS directly or optionally via a POS server or other communication/connection. The account information read from
20 the smart card may then be used during the admission process or to update the server's records.

 Using the reader, an attendant accesses the user's account to determine whether a ticket purchase has in fact been made. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on
25 this account information, the user is either admitted or turned away. In particular, after reading the account information, the identifier is checked for validity (step 3212). If the identifier is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 3216). Then the theatre attendant may direct the user to customer assistance (step 3220) where another attendant or customer service representative can attempt to resolve the problem (step 3224). If entry is
30 denied because the account has not been activated, the user may be asked to subscribe and purchase a ticket. Furthermore, also at this time, addition promotional incentives may be brought to the user's attention (step 3228). Afterward, if the user has decided to subscribe he or she may return to recommence the admission process (step 3204). Otherwise, if the problem was not resolved, processing ends (step 3232).

Returning to step 3212, if the identifier is valid, the user is admitted (step 3236). Then, if no other purchases have been made, the user proceeds to the theatre (step 3252). However, if the user has made additional purchases (step 3240), such as, for instance, merchandise or concession purchases, he or she is directed to a customer station where the items may be retrieved. At the station, the user
5 presents the identification device to an attendant who then accesses the user's account stored on the user's smart card (step 3244). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 3248). From there, the user proceeds to the theatre (3252) and processing ends (step 3232).

10 Furthermore, in any of the embodiments of the present invention, readers may be installed on the theatre seats for use in delivering concessions during or before the movie. With this optional feature, instead of picking up concessions at a concession stand, the user selects a seat, inserts his or her smart card into a smart card reader accessible from the seat to facilitate delivery of the concessions. More particularly, the reader uniquely identifies the selected seat and facilitates the delivery of the
15 purchased concessions directly to the user.

FIG. 33 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from a client system such as, for instance, personal computer 3301, a user commences the process by transmitting a transaction request to POS theatre
20 3310 or optionally via a POS server and then to POS theatre 3310 or other communication method via network 3306 (steps 3304 and 3308). Included with the request, among other things, are the user's identification information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 3310 interactively responds to the user's inquiries, displays messages and advertisements, and finalizes the transaction by transmitting an e-ticket
25 to client 3301 (steps 3312 and 3316). In accordance with the principles of the present invention, the e-ticket, then, is written or encoded onto the user's smart card using writer/reader 3322 (step 3320).

Subsequently, POS theatre 3310 optionally updates the account information associated with the user. For example, POS theatre 3310 updates any local databases, as well as databases/accounts located
30 at any concession stands 3334 (step 3332) and/or readers 3326 (step 3324). Optionally, in response to the POS theatre's transmissions, concession stand 3334 and reader 3326 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 3336 and 3328).

35 Shortly before show time, the user arrives at the theatre with smart card 3346 in hand. To gain admission to the theatre, the user presents smart card 3346 to an attendant who then accesses the user's

account stored conveniently on the smart card and/or on system memory (step 3340). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 3344). A similar procedure is used to obtain merchandise and concessions. In particular, the user presents his or her smart card to an attendant at concession stand
5 3334 (step 3348). The smart card is read, the account is accessed, and products are delivered to the user in accordance with the user's account (step 3352).

An example of another embodiment of a purchase routine utilizing a wireless device is illustrated in FIG. 34. To commence the purchase routine (step 3400), a user utilizes a wireless device
10 including, for example, a Bluetooth enabled device, to log on to or establish a connection with the POS server (step 3404). As discussed above, the user may connect to the POS server via a transmitting/receiving tower or any other suitable means. After establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password associated with the user and his or her wireless device. The identifier is then checked for validity (step
15 3408).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests from his or her wireless device including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request (step 3412). In this
20 embodiment, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 3416).

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 3420) for the user's selection (step 3424). If the user fails to make a selection, processing ends
25 (step 3428). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 3432). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

Once all desired selections have been made (step 3436), an e-ticket is optionally transmitted to the user (step 3440). Again, the e-ticket preferably is encrypted or includes some sort of watermark to ensure originality and to prevent counterfeits. The e-ticket is then stored in, for example, main memory of the user's wireless device (step 3448). Again, as mentioned above, advertisements may be displayed
35 at any time, including during the closing transaction where payment information is forwarded to the POS server and POS at the theatre or directly to the POS theatre (step 3452). The routine continues,

then, with POS server optionally updating the account information at each reader (step 3456). Processing ends, once updating is complete (step 3428).

One example of the process used to redeem a ticket purchased according to this embodiment is discussed with reference to FIG. 35. In this procedure, processing starts (step 3500) with the presentation of the wireless device by the user to a movie theatre attendant (step 3504). Subsequently, the wireless device is read by a reader (step 3508). Reading may be effected by, for example, transmitting information via an infrared transmission to the reader. In this manner, an identifier, account information, or e-ticket information is transmitted from the wireless device to the reader and/or POS server, which may then be used during the admission process and/or to update the server's records.

The attendant next accesses the user's account to determine whether a ticket purchase has in fact been made. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned away. In particular, an identifier retrieved from the account information is first checked for validity (step 3512). If the identifier is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 3516). Then the theatre attendant may direct the user to customer assistance (step 3520) where another attendant or customer service representative can attempt to resolve the problem (step 3524). If entry is denied because the account has not been activated, the user may be asked to subscribe and purchase a ticket. Furthermore, additional promotional incentives may at this time be brought to the user's attention (step 3528). Afterward, if the user has decided to subscribe he or she may return to the theatre entrance to recommence the admission process (step 3504), or if the problem was not resolved, processing ends (step 3532).

Returning to step 3512, if the identifier is valid, the user is admitted (step 3536). Optionally, for reserved seating embodiments, a receipt or seating confirmation may be printed by either the attendant or the user's identification device for use in gaining admission to the actual seat, as proof of purchase against other customers, or for readmission. Then, if no other purchases have been made, the user proceeds to the theatre (step 3552). However, if the user has made additional purchases (step 3540), such as, for instance, merchandise or concessions, he or she is directed to a customer station where the items may be retrieved. At the station, the user presents the wireless device to an attendant who then accesses the user's account stored on the user's wireless device (step 3540). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 3548). From there, the user proceeds to the theatre (3552) and processing ends (step 3532).

Furthermore, in any of the embodiments of the present invention, readers may be installed on the theatre seats for use in delivering concessions during or before the movie. With this optional feature, instead of picking up concessions at a concession stand, the user selects a seat, and transmits an identifier from his or her wireless device into a reader accessible from the seat to facilitate delivery of the concessions. More particularly, the reader uniquely identifies the selected seat. Subsequently, the purchased concessions are delivered directly to the user.

FIG. 36 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from the user's wireless device 3601, the user commences the process by transmitting a transaction request to POS theatre 3610 directly or via a POS server via transmitter 3602, wireless base station 3603, and network 3606 (steps 3604 and 3608). Included with the request, among other things, are the user's identification and requests regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 3610 interactively responds to the user's inquiries, displays advertisements and messages, and finalizes the transaction by transmitting an e-ticket to wireless device 3601 (steps 3612 and 3616).

In accordance with the principles of the present invention, the e-ticket, then, is written or stored onto memory of the user's wireless device 3601. Subsequently, POS theatre 3610 optionally updates account information associated with the user. For example, POS theatre 3610 updates any local databases, as well as databases/accounts located at any concession stands 3630 (step 3628) and/or readers 3622 (step 3620). Optionally, in response to the POS theatre's transmissions, concession stand 3630 and reader 3622 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 3632 and steps 3624).

Shortly before show time, the user arrives at the theatre with his or her wireless device 3601. To gain admission to the theatre, the user transmits an identifier or account information via, for example, an infrared transmission to a reader (step 3636). After checking the user's account, an attendant either admits or denies admission to the user based on the information contained in the account (step 3640). A similar procedure is used to obtain merchandise and concessions. In particular, the user transmits account information via, for example, an infrared transmission to a reader at a concession stand 3630 (step 3648). An attendant then accesses the account, and products may subsequently be delivered to the user (step 3644).

FIG. 37 depicts another purchase routine utilizing biometrics information/data as the user's identification device and/or identifier. In this embodiment, biometrics, or physiological or behavioral

aspects of the human body, are used for authentication or identification after a purchase. In these embodiments, any aspect may be utilized including, for example, finger or thumb prints, iris or retina images, electronic signatures, voice or facial scans, hand scans, and or any other similar features. To commence this purchase routine (step 3700), a user utilizes any of the above described client systems, to log on to or establish a connection with a POS server and/or directly to the POS (step 3704). As with the above embodiments, after establishing a connection to the POS server, the user enters subscriber information including, for instance, an identifier and/or a password. The identifier is then checked for validity (step 3708).

Subsequent to the validity check, an interactively navigable display is presented to allow the user to enter any number of requests including, for example, a particular movie or a conveniently located theatre, and/or any other analogous request and to allow data to be collected from the user (step 3712). In addition, as with any of the above examples, numerous advertisements or other banners may also be displayed. In this embodiment, a list of movie theatres is displayed and the user is prompted to select a particular theatre (step 3716). Of course other processing routines are possible.

After selecting a theatre, a listing of the movies showing at the selected theatre is displayed (step 3720) for the user's selection (step 3724). If the user fails to make a selection, processing ends (step 3728). If the user successfully schedules a movie selection, a listing of concessions and/or other merchandise may then be displayed (step 3732). Additionally, the user may, at any time, opt into or enter a concession or merchandise menu where these purchases may be made. Furthermore, the user may optionally at any time access additional information regarding the movie, or the theatre or any other similar information.

Once all desired selections have been made (step 3736), a receipt and/or an e-ticket is optionally transmitted to the user, and may be printed at the user's convenience (step 3740). Again, as mentioned above, advertisements may be displayed at any time, including during the closing transaction where payment information is optionally forwarded to the POS server (step 3752). The routine continues, then, with POS server optionally updating the account information at each reader or scanning device (step 3756). Furthermore, in these embodiments, each account is associated with a piece of biometrics information. For example, an account may utilize a user's fingerprint or retina image as an identifier. Processing ends, once updating of these accounts is complete (step 3728).

One example of a process used to redeem this purchase is discussed with reference to FIG. 38. In this procedure, processing starts (step 3800) with the arrival of the user at a POS scanner/reader (step 3804). Subsequently, the user's biometrics information is scanned or captured by an automated or

attendant operated scanner/reading device (step 3808). Reading may be effected by, for example, scanning the user's eye, or collecting the user's signature, scanning the user's voice or face or any other similar aspect.

5 After scanning, for example, the user's retina, an attendant gains access to the user's account as identified by the retina image (stored for example in the server and accessed via a network linked to the scanner) to determine whether a ticket purchase has in fact been made. As discussed above, the account not only indicates ticket information, but may also include information regarding concession or merchandise purchases as well. Based on this account information, the user is either admitted or turned
10 away. After gathering the biometrics information, the account is checked for validity (step 3812). If the account is invalid because a ticket has not been purchased or because of equipment failure, entry is denied (step 3816). Then the theatre attendant may direct the user to customer assistance (step 3820) where another attendant or customer service representative can attempt to resolve the problem (step 3824). If entry is denied because the account has not been activated, the user may be asked to subscribe and purchase a ticket. After deciding to purchase a ticket, the user's biometrics information is collected
15 via, for example, a capture device, and stored in the theatre/POS servers and/or each individual reader (step 3828). Afterward, if the user has decided to subscribe he or she may return to recommence the admission process (step 3804). Otherwise, if the problem was not resolved, processing ends (step 3832).

20 Returning to step 3812, if the account is valid and a ticket has been purchased, the user is admitted (step 3836). Then, if no other purchases have been made, the user proceeds to the theatre (step 3852). However, if the user has made additional purchases (step 3840), such as, for instance, merchandise or concession purchases, he or she is directed to a customer station where the items may
25 be retrieved. At the station, the user again has his or her biometrics information scanned by an attendant or by an auto-attendant which then accesses the user's account (step 3844). If the account indicates that a purchase has previously been made, the merchandise is delivered to the user (step 3848). From there, the user proceeds to the theatre (3852) and processing ends (step 3832).

30 FIG. 39 depicts a combined architecture and process diagram used to illustrate some of the concepts of this particular embodiment. Initially, from a client system such as, for instance, personal computer 3901, a user commences the process by transmitting a transaction request to POS theatre 3910 or optionally via a POS server and then to POS theatre 3910 or other communication method via network 3906 (steps 3904 and 3908). Included with the request, among other things, are the user's
35 biometrics information and purchase information regarding, for example, a movie selection, time, location, merchandise, and/or concessions. As part of the user's request, POS theatre 3910 interactively

responds to the user's inquires, displays messages and advertisements, and finalizes the transaction by optionally transmitting an e-ticket or receipt to client 3901 (steps 3912 and 3916). In accordance with the principles of the present invention, the e-ticket, then, is printed at the user's convenience.

5 Also in this embodiment, biometrics information may be captured at, for example, the user's PC 3901 via, for example a scanner or other capture device 3918. Subsequently, this information may be transmitted with order information for use in establishing an account. Alternatively, a theatre capture device 3920 linked to POS theatre 3910 or some other scanning device connected to network 3906 may be used in an initialization process to gather biometrics information, which may then be
10 associated with an account stored in, for example, server 3910.

Subsequently, POS theatre 3910 optionally updates the account information associated with the user. For example, POS theatre 3910 updates any local databases, as well as databases/accounts located at any concession stands 3934 (step 3932) and/or readers 3926 (step 3924). Optionally, in response to
15 the POS theatre's transmissions, concession stand 3934 and reader 3926 may transmit acknowledgements indicating that the user's account has successfully been updated (steps 3936 and 3928).

Shortly before show time, the user arrives at the theatre. To gain admission to the theatre, an
20 attendant scans the user's biometrics data 3946 to accesses the user's account (step 3940). After checking the user's account, the attendant either admits or denies admission to the user based on the information contained in the account (step 3944). A similar procedure is used to obtain merchandise and concessions. In particular, the user's information is again scanned by an attendant at concession stand 3934 (step 3948). The account is accessed, and products are delivered to the user in accordance
25 with the user's account (step 3952).

Viewed externally in FIG. 40, a computer system designated by reference numeral 40 has a computer 42 having disk drives 44 and 46. Disk drive indications 44 and 46 are merely symbolic of a number of disk drives which might be accommodated by the computer system. Typically, these would
30 include a floppy disk drive 44, a hard disk drive (not shown externally) and a CD ROM indicated by slot 46. The number and type of drives vary, typically with different computer configurations. Disk drives 44 and 46 are in fact optional, and for space considerations, are easily omitted from the computer system used in conjunction with the production process/apparatus described herein.

35 The computer system also has an optional display upon which information screens may be displayed. In some situations, a keyboard 50 and a mouse 52 are provided as input devices through

which a user's actions may be inputted, thus allowing input to interface with the central processing unit 42. Then again, for enhanced portability, the keyboard 50 is either a limited function keyboard or omitted in its entirety. In addition, mouse 52 optionally is a touch pad control device, or a track ball device, or even omitted in its entirety as well, and similarly may be used to input a user's selections. In addition, the computer system also optionally includes at least one infrared transmitter and/or infrared received for either transmitting and/or receiving infrared signals, as described below.

FIG. 41 illustrates a block diagram of the internal hardware of the computer system 40 of FIG. 40. A bus 56 serves as the main information highway interconnecting the other components of the computer system 40. CPU 58 is the central processing unit of the system, performing calculations and logic operations required to execute the processes of the instant invention as well as other programs. Read only memory (ROM) 60 and random access memory (RAM) 62 constitute the main memory of the computer. Disk controller 64 interfaces one or more disk drives to the system bus 56. These disk drives are, for example, floppy disk drives such as 70, or CD ROM or DVD (digital video disks) drive such as 66, or internal or external hard drives 68. As indicated previously, these various disk drives and disk controllers are optional devices.

A display interface 72 interfaces display 48 and permits information from the bus 56 to be displayed on the display 48. Again as indicated, display 48 is also an optional accessory. For example, display 48 could be substituted or omitted. Communications with external devices, for example, the other components of the system described herein, occur utilizing communication port 74. For example, optical fibers and/or electrical cables and/or conductors and/or optical communication (e.g., infrared, and the like) and/or wireless communication (e.g., radio frequency (RF), and the like) can be used as the transport medium between the external devices and communication port 74. Peripheral interface 54 interfaces the keyboard 50 and the mouse 52, permitting input data to be transmitted to the bus 56. In addition to the standard components of the computer, the computer also optionally includes an infrared transmitter 78 and/or infrared receiver 76. Infrared transmitters are optionally utilized when the computer system is used in conjunction with one or more of the processing components/stations that transmits/receives data via infrared signal transmission. Instead of utilizing an infrared transmitter or infrared receiver, the computer system may also optionally use a low power radio transmitter 80 and/or a low power radio receiver 82 as shown in the alternate embodiment of FIG. 42. The low power radio transmitter transmits the signal for reception by components of the production process, and receives signals from the components via the low power radio receiver. The low power radio transmitter and/or receiver are standard devices in industry.

FIG. 43 is an illustration of an exemplary memory medium 84 which can be used with disk drives illustrated in FIGS. 40-42. Typically, memory media such as floppy disks, or a CD ROM, or a digital video disk will contain, for example, a multi-byte locale for a single byte language and the program information for controlling the computer to enable the computer to perform the functions described herein. Alternatively, ROM 60 and/or RAM 62 illustrated in FIGS. 40-42 can also be used to store the program information that is used to instruct the central processing unit 58 to perform the operations associated with the instant processes.

Although computer system 40 is illustrated having a single processor, a single hard disk drive and a single local memory, the system 40 is optionally suitably equipped with any multitude or combination of processors or storage devices. Computer system 40 is, in point of fact, able to be replaced by, or combined with, any suitable processing system operative in accordance with the principles of the present invention, including sophisticated calculators, and hand-held, laptop/notebook, mini, mainframe and super computers, as well as processing system network combinations of the same.

Conventional processing system architecture is more fully discussed in Computer Organization and Architecture, by William Stallings, MacMillan Publishing Co. (3rd ed. 1993); conventional processing system network design is more fully discussed in Data Network Design, by Darren L. Spohn, McGraw-Hill, Inc. (1993), and conventional data communications are more fully discussed in Data Communications Principles, by R.D. Gitlin, J.F. Hayes and S.B. Weinstein, Plenum Press (1992) and in The Irwin Handbook of Telecommunications, by James Harry Green, Irwin Professional Publishing (2nd ed. 1992). Each of the foregoing publications is incorporated herein by reference. Alternatively, the hardware configuration is, for example, arranged according to the multiple instruction multiple data (MIMD) multiprocessor format for additional computing efficiency. The details of this form of computer architecture are disclosed in greater detail in, for example, U.S. Patent No. 5,163,131; Boxer, A., Where Buses Cannot Go, IEEE Spectrum, February 1995, pp. 41-45; and Barroso, L.A. et al., RPM: A Rapid Prototyping Engine for Multiprocessor Systems, IEEE Computer February 1995, pp. 26-34, all of which are incorporated herein by reference.

In alternate preferred embodiments, the above-identified processor, and, in particular, CPU 58, may be replaced by or combined with any other suitable processing circuits, including programmable logic devices, such as PALs (programmable array logic) and PLAs (programmable logic arrays). DSPs (digital signal processors), FPGAs (field programmable gate arrays), ASICs (application specific integrated circuits), VLSIs (very large scale integrated circuits) or the like.

FIG. 44 is an illustration of the architecture of the combined Internet, POTS (plain, old, telephone service), and ADSL (asymmetric, digital, subscriber line) for use in accordance with the principles of the present invention. Furthermore, it is to be understood that the use of the Internet, ADSL, and POTS are for exemplary reasons only and that any suitable communications network may be substituted without departing from the principles of the present invention. This particular example is briefly discussed below.

In FIG. 44, to preserve POTS and to prevent a fault in the ADSL equipment 254, 256 from compromising analog voice traffic 226, 296 the voice part of the spectrum (the lowest 4 kHz) is separated from the rest by a passive filter, called a POTS splitter 258, 260. The rest of the available bandwidth - - from about 10 kHz to 1 MHz - - carries data at rates up to 6 bits per second for every hertz of bandwidth from data equipment 262, 264, and 294. The ADSL equipment 256 then has access to a number of destinations including significantly the Internet 220 or other data communications networks, and other destinations 270, 272.

To exploit the higher frequencies, ADSL makes use of advanced modulation techniques, of which the best known is the discrete multitone (DMT) technology. As its name implies, ADSL transmits data asymmetrically - - at different rates upstream toward the central office 252 and downstream toward the subscriber 250.

Cable television providers are providing analogous Internet service to PC users over their TV cable systems by means of special cable modems. Such modems are capable of transmitting up to 30 Mb/s over hybrid fiber/coax system, which use fiber to bring signals to a neighborhood and coax to distribute it to individual subscribers.

Cable modems come in many forms. Most create a downstream data stream out of one of the 6-MHz TV channels that occupy spectrum above 50 MHz (and more likely 550 MHz) and carve an upstream channel out of the 5-50-MHz band, which is currently unused. Using 64-state quadrature amplitude modulation (64 QAM), a downstream channel can realistically transmit about 30 Mb/s (the oft-quoted lower speed of 10 Mb/s refers to PC rates associated with Ethernet connections). Upstream rates differ considerably from vendor to vendor, but good hybrid fiber/coax systems can deliver upstream speeds of a few megabits per second. Thus, like ADSL, cable modems transmit much more information downstream than upstream. Then Internet architecture 220 and ADSL architecture 254, 256 may also be combined with, for example, user networks 222, 224, and 228.

In accordance with the principles of the present invention, in one example, a main computing server implementing the process of the invention may be located on one or more computing nodes or terminals (e.g., on user networks 222, 224, and 228 or system 240). Then, various users may interface with the main server via, for instance, the ADSL equipment discussed above, and access the
5 information and processes of the present invention from remotely located PCs. As illustrated in this embodiment, users may access or use or interact with the computer assisted program in computer system 40 via various access methods. Databases 85, 86, 87, 88, and 40 are accessible via, for example computer system 40 and may be used in conjunction with client manager module 91, tracking module 92, smart card readers 93, for the various functions described above.

10

The above embodiments are only to be construed as examples of the various different types of computer systems that may be utilized in connection with the computer assisted-implemented process for purchasing and provisioning items over global and/or local networks.

15

The many features and advantages of the invention are apparent from the detailed specification, and thus, it is intended by the appended claims to cover all such features and advantages of the invention which fall within the true spirit and scope of the invention. Further, since numerous modifications and variations will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation illustrated and described, and accordingly, all suitable
20 modifications and equivalents may be resorted to, falling within the scope of the invention.

CLAIMS

What is claimed is:

1. A method of initializing an account for use in purchasing and provisioning admittance to
5 entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to an event customer via a data communication network, said method comprising:

receiving a communication from the customer at a server via said data communication network,
10 requesting activation of said account;

activating, in response to said communication, said account to allow storage of information
therein regarding a purchase made by said customer, including admittance to at least one entertainment
event and optionally concession purchases to be provided to the event customer at the at least one
event;

15 associating, in response to said communication, an identifier with said customer; and

distributing an identification device to said customer, said identification device having said
20 identifier stored therein utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the event customer to the at least one entertainment event.

2. A method of initializing an account for use in a provisioning process, said method comprising:

receiving a communication from a user requesting activation of said account;

25 activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event; and

30 distributing an identification device to said user upon verifying activation of said account, said identification device having an identifier stored therein utilizable for accessing said account at a point of sale for authorizing and provisioning of said purchase and to admit the user to the at least one entertainment event.

3. The method of claim 2, wherein said activating further comprises storing an indication of the user's identity and wherein said identification device is distributed to said user after verifying said user's identity.
4. The method of claim 2, further comprising transmitting a confirmation to said user after
5 activating said account and wherein said identification device is distributed to said user after presentation of said confirmation.
5. The method of claim 4, wherein said confirmation comprises at least one of a ticket, password, receipt, or other confirmation code.
6. The method of claim 2, further comprising transmitting to said user instructions prompting said
10 user to activate said account.
7. The method of claim 6, wherein said instructions comprise a mail communication.
8. The method of claim 6, wherein said instructions comprise a electronic mail message.
9. The method of claim 2, wherein said distributing comprises mailing said identification device to said user.
10. The method of claim 2, wherein said distributing comprises delivering said identification
15 device to said user at said point of sale or other location.
11. The method of claim 2, wherein said communication further includes demographics.
12. The method of claim 2, wherein said communication further includes payment information.
13. The method of claim 2, further comprising transmitting advertisements to said user.
14. The method of claim 2, wherein said identification device includes advertisements located
20 thereon.
15. The method of claim 2, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.
16. The method of claim 2, wherein said communication is transmitted by said user from a client to
25 a server via a data communication network.

17. The method of claim 16, wherein said account is stored in at least one of said server and said identification device.

18. The method of claim 2, wherein said event includes a reserved seating event, and wherein a seat location is stored on said identification device.

5 19. The method of claim 2, further comprising prompting said user for purchases to be provisioned at said event.

20. The method of claim 2, further comprising, prior to said step of receiving a communication, transmitting a message to the user prompting the user to activate said account; and wherein said step of receiving a communication from the user comprises logging on to a website by said user and requesting
10 activation of said account.

21. The method of claim 20, wherein said step of transmitting a message to the user comprises at least one of mailing an advertisement or transmitting an electronic mail message to the user.

22. A method of initializing an account for use in a provisioning process, said method comprising:

15 receiving a communication from a user requesting activation of said account;

activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event;

20 associating, in response to said communication, an identifier with said user; and

transmitting said identifier to said user for storage in a memory of an identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

25 23. The method of claim 22, further comprising storing said identifier in said memory of said identification device.

24. The method of claim 22, wherein said communication is transmitted from said user by a client to a server via a data communication network and wherein said client is used to write said identifier
30 onto said memory of said identification device.

25. The method of claim 24, wherein said account is stored in at least one of said server and said identification device.

26. The method of claim 22, wherein said communication further includes demographics.

27. The method of claim 22, wherein said communication further includes payment information.

5 28. The method of claim 22, further comprising transmitting advertisements to said user.

29. The method of claim 22, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

30. A method of initializing an account for use in a provisioning process, said method comprising:

10 distributing an identification device to a user, said identification device having an identifier stored therein, wherein said identification device and said identifier are associated with the user, and wherein said identification device or a communication included therewith directs the user to access at least one website via the Internet to activate the account;

15 receiving a communication from the user requesting activation of said account via accessing the website and via the Internet; and

activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event
20 and optionally concession purchases to be provided to the user at the at least one event, wherein said account is accessible at a point of sale for provisioning of said purchase upon presentation of said identification device and to admit the user to the at least one entertainment event.

31. The method of claim 30, wherein said distributing further comprises forwarding to said user
25 instructions for transmitting said communication.

32. The method of claim 30, wherein said distributing comprises mailing said identification device to said user.

33. The method of claim 30, wherein said distributing comprises delivering said identification device to said user at a point of sale or other location.

30 34. The method of claim 30, wherein said communication is transmitted from said user to a server via a data communication network.

35. The method of claim 34, wherein said account is stored in at least one of said server and said identification device.

36. The method of claim 30, wherein said communication further includes demographics.

37. The method of claim 30, wherein said communication further includes payment information.

5 38. The method of claim 30, further comprising transmitting advertisements to said user.

39. The method of claim 30, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

40. A method of initializing an account for use in purchasing and provisioning admittance to
10 entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to a user via a data communication network, said method comprising:

receiving a communication from the user at a server via said data communication network,
requesting activation of said account, said communication including an identifier comprising biometrics
15 information captured from said user;

activating, in response to said communication, said account to allow storage of information
therein regarding a purchase made by said user including admittance to at least one entertainment event
and optionally concession purchases to be provided to the event user at the at least one event; and

20

associating, in response to said communication, said identifier with said user, wherein said
account is accessible upon scanning said biometrics information, at a point of sale for provisioning of
said purchase and to admit the event user to the at least one entertainment event.

25 41. A system for initializing an account for use in a provisioning process, said system comprising:

a server comprising a processor and a memory medium containing instructions for controlling
said processor, wherein said processor is capable of:

receiving a communication from a user requesting activation of said account;

30

activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event; and

5 facilitating distribution of an identification device to said user upon verifying activation of said account, said identification device having an identifier stored therein utilizable for accessing said account at a point of sale for authorizing and provisioning of said purchase and to admit the user to the at least one entertainment event.

10 42. The system of claim 41, wherein said activating further comprises storing an indication of the user's identity and wherein said identification device is distributed to said user after verifying said user's identity.

 43. The system of claim 41, wherein said processor is further capable of transmitting a confirmation to said user after activating said account and wherein said identification device is
15 distributed to said user after presentation of said confirmation.

 44. The system of claim 41, wherein said processor is further capable of transmitting to said user instructions prompting said user to activate said account.

 45. The system of claim 44, wherein said instructions comprise a electronic mail message.

 46. The system of claim 41, wherein said processor is further capable of transmitting
20 advertisements to said user.

 47. The system of claim 41, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

 48. The system of claim 41, wherein said communication is transmitted by said user from a client
25 to said processor via a data communication network.

 49. The system of claim 48, wherein said account is stored in at least one of said processor and said identification device.

 50. The system of claim 41, wherein said event includes a reserved seating event, and wherein a seat location is stored on said identification device.

51. The system of claim 41, wherein said processor is further capable of prompting said user for purchases to be provisioned at said event.

52. The system of claim 41, wherein said processor is further capable of facilitating transmission of, prior to receiving the communication, a message to the user prompting the user to activate said
5 account; and wherein the communication is received via logging on to a website by the user and requesting activation of said account.

53. The system of claim 52, wherein said transmission comprises at least one of mailing an advertisement or transmitting an electronic mail message to the user.

54. A system of initializing an account for use in a provisioning process, said system comprising:

10 a server comprising a processor and a memory medium containing instructions for controlling said processor, wherein said processor is capable of:

receiving a communication from a user requesting activation of said account;

15 activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event;

associating, in response to said communication, an identifier with said user; and

20 transmitting said identifier to said user for storage in a memory of an identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

25 55. The system of claim 54, wherein said communication is transmitted from said user by a client to said processor via a data communication network and wherein said client is used to write said identifier onto said memory of said identification device.

56. The system of claim 55, wherein said account is stored in at least one of said processor and said identification device.

30 57. The system of claim 54, wherein said communication further includes demographics.

58. The system of claim 54, wherein said communication further includes payment information.

59. The system of claim 54, wherein said processor is further capable of transmitting advertisements to said user.

60. The system of claim 54, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a
5 wireless device.

61. A system of initializing an account for use in a provisioning process, said system comprising:

a server comprising a processor and a memory medium containing instructions for controlling said processor, wherein said processor is capable of:

10 facilitating distribution of an identification device to a user, said identification device having an identifier stored therein, wherein said identification device and said identifier are associated with the user, and wherein said identification device or a communication included therewith directs the user to access at least one website via the Internet to activate the account;

15 receiving a communication from the user requesting activation of said account via accessing the website and via the Internet; and

activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event
20 and optionally concession purchases to be provided to the user at the at least one event, wherein said account is accessible at a point of sale for provisioning of said purchase upon presentation of said identification device and to admit the user to the at least one entertainment event.

62. The system of claim 61, wherein said distribution further comprises forwarding to said user
25 instructions for transmitting said communication.

63. The system of claim 61, wherein said communication is transmitted from said user to said processor via a data communication network.

64. The system of claim 61, wherein said account is stored in at least one of said processor and said identification device.

30 65. The system of claim 61, wherein said communication further includes demographics.

66. The system of claim 61, wherein said communication further includes payment information.

67. The system of claim 61, wherein said processor is further capable of transmitting advertisements to said user.

68. The system of claim 61, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a
5 wireless device.

69. A system for use in initializing an account for use in purchasing and provisioning admittance to entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, opening-seating events, and any combination thereof, to an event user via a data communication network, said system comprising:

10 a server comprising a processor and a memory medium containing instructions for controlling said processor, wherein said processor is capable of:

receiving a communication from the user at a server via said data communication network, requesting activation of said account, said communication including an identifier comprising biometrics
15 information captured from said user;

activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user including admittance to at least one entertainment event and optionally concession purchases to be provided to the event user at the at least one event; and
20

associating, in response to said communication, said identifier with said user, wherein said account is accessible upon scanning said biometrics information, at a point of sale for provisioning of said purchase and to admit the event user to the at least one entertainment event.

25 70. A computer program product, comprising:

a memory medium; and

a computer program stored on said memory medium for initializing an account for use in a provisioning process, said computer program containing instructions for receiving a communication
30 from a user requesting activation of said account; activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event; and facilitating distribution of an identification device to said user upon

verifying activation of said account, said identification device having an identifier stored therein utilizable for accessing said account at a point of sale for authorizing and provisioning of said purchase and to admit the user to the at least one entertainment event.

5 71. The computer program product of claim 70, wherein said activating further comprises storing an indication of the user's identity and wherein said identification device is distributed to said user after verifying said user's identity.

72. The computer program product of claim 70, further comprising instructions for transmitting a confirmation to said user after activating said account and wherein said identification device is
10 distributed to said user after presentation of said confirmation.

73. The computer program product of claim 70, further comprising instructions for transmitting to said user instructions prompting said user to activate said account.

74. The computer program product of claim 73, wherein said instructions comprise a electronic mail message.

15 75. The computer program product of claim 70, wherein said communication further includes demographics.

76. The computer program product of claim 70, wherein said communication further includes payment information.

20 77. The computer program product of claim 70, further comprising instructions for transmitting advertisements to said user.

78. The computer program product of claim 70, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

25 79. The computer program product of claim 70, wherein said communication is transmitted by said user from a client to a server via a data communication network.

80. The computer program product of claim 70, wherein said account is stored in at least one of said server and said identification device.

81. The computer program product of claim 70, wherein said event includes a reserved seating event, and wherein a seat location is stored on said identification device.

82. The computer program product of claim 70, further comprising instructions for prompting said user for purchases to be provisioned at said event.

83. The computer program product of claim 70, further comprising instructions for transmitting, prior to said step of receiving a communication, a message to the user prompting the user to activate said account; and wherein said instructions for receiving a communication from the user comprises instructions for facilitating logging on to a website by said user and requesting activation of said account.

84. The computer program product of claim 83, wherein said instructions for transmitting a message to the user comprises at least one of instructions for facilitating mailing of an advertisement or transmitting an electronic mail message to the user.

85. A computer program product, comprising:

a memory medium; and

a computer program stored on said memory medium for initializing an account for use in a provisioning process, said computer program containing instructions for receiving a communication from a user requesting activation of said account; activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event; associating, in response to said communication, an identifier with said user; and transmitting said identifier to said user for storage in a memory of an identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

86. The computer program product of claim 85, further comprising instructions for storing said identifier in said memory of said identification device.

87. The computer program product of claim 85, wherein said communication is transmitted from said user by a client to a server via a data communication network and wherein said client is used to write said identifier onto said memory of said identification device.

88. The computer program product of claim 87, wherein said account is stored in at least one of said server and said identification device.

89. The computer program product of claim 85, wherein said communication further includes demographics.

90. The computer program product of claim 85, wherein said communication further includes payment information.

91. The computer program product of claim 85, further comprising instructions for transmitting advertisements to said user.

5 92. The computer program product of claim 85, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

93. A computer program product, comprising:

a memory medium; and

10

a computer program stored on said memory medium for initializing an account for use in a provisioning process, said computer program containing instructions for facilitating distribution of an identification device to a user, said identification device having an identifier stored therein, wherein said identification device and said identifier are associated with the user, and wherein said identification
15 device or a communication included therewith directs the user to access at least one website via the Internet to activate the account; receiving a communication from the user requesting activation of said account via accessing the website and via the Internet; and activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be
20 provided to the user at the at least one event, wherein said account is accessible at a point of sale for provisioning of said purchase upon presentation of said identification device and to admit the user to the at least one entertainment event.

25 94. The computer program product of claim 93, wherein said distributing further comprises forwarding to said user instructions for transmitting said communication.

95. The computer program product of claim 93, wherein said communication is transmitted from said user to a server via a data communication network.

96. The computer program product of claim 95, wherein said account is stored in at least one of said server and said identification device.

30 97. The computer program product of claim 93, wherein said communication further includes demographics.

98. The computer program product of claim 93, wherein said communication further includes payment information.

99. The computer program product of claim 93, further comprising instructions for transmitting advertisements to said user.

5 100. The computer program product of claim 93, wherein said identification device comprises at least one of: a smart card, a credit card, a ticket, a wireless phone, a personal digital assistant, an Internet ready watch, and a wireless device.

101. A computer program product, comprising:

a memory medium; and

10

a computer program stored on said memory medium for initializing an account for use in purchasing and provisioning admittance to entertainment events including at least one of sporting events, movies, theatre events, reserved-seating events, open-seating events, and any combination thereof, to an event user via a data communication network, said computer program containing
15 instructions for receiving a communication from the user at a server via said data communication network, requesting activation of said account, said communication an identifier including biometrics information captured from said user; activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user including admittance to at least one entertainment event and optionally concession purchases to be provided to the event user at
20 the at least one event; and associating, in response to said communication, said identifier with said user, wherein said account is accessible upon scanning said biometrics information, at a point of sale for provisioning of said purchase and to admit the event user to the at least one entertainment event.

102. A method of initializing an account for use in a provisioning process, said method
25 comprising:

a step for receiving a communication from a user requesting activation of said account;

a step for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one
30 entertainment event and optionally concession purchases to be provided to the user at the at least one event; and

a step for distributing an identification device to said user upon verifying activation of said account, said identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

- 5 103. A method of initializing an account for use in a provisioning process, said method comprising:

a step for receiving a communication from a user requesting activation of said account;

- 10 a step for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event;

15 a step for associating, in response to said communication, an identifier with said user; and

a step for transmitting said identifier to said user for storage in a memory of an identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

- 20 104. A method of initializing an account for use in a provisioning process, said method comprising:

25 a step for distributing an identification device to a user, said identification device having an identifier stored therein, wherein said identification device and said identifier are associated with the user, and wherein said identification device or a communication included therewith directs the user to access at least one website via the Internet to activate the account;

a step for receiving a communication from the user requesting activation of said account via accessing the website and via the Internet; and

- 30 a step for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event, wherein said account is accessible at a point of sale for provisioning of said purchase upon presentation of said identification device and to admit the user to the at least one entertainment event.

35

105. A method of initializing an account for use in a provisioning process, said method comprising:

a step for receiving a communication from a user requesting activation of said account; and

5 a step for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, said account being accessible at a point of sale upon presentation of an identification device for provisioning of said purchase.

106. A system for initializing an account for use in a provisioning process, said system comprising:

10 means for receiving a communication from a user requesting activation of said account;

means for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event; and

15 means for distributing an identification device to said user upon verifying activation of said account, said identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

20 107. A system for initializing an account for use in a provisioning process, said system comprising:

means for receiving a communication from a user requesting activation of said account;

25 means for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event;

means for associating, in response to said communication, an identifier with said user; and

30 means for transmitting said identifier to said user for storage in a memory of an identification device utilizable for accessing said account at a point of sale for provisioning of said purchase and to admit the user to the at least one entertainment event.

35 108. A system for initializing an account for use in a provisioning process, said system comprising:

means for distributing an identification device to a user, said identification device having an identifier stored therein, wherein said identification device and said identifier are associated with the user, and wherein said identification device or a communication included therewith directs the user to access at least one website via the Internet to activate the account;

5

means for receiving a communication from the user requesting activation of said account via accessing the website and via the Internet; and

means for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, including admittance to at least one entertainment event and optionally concession purchases to be provided to the user at the at least one event, wherein said account is accessible at a point of sale for provisioning of said purchase upon presentation of said identification device and to admit the user to the at least one entertainment event.

109. A system of initializing an account for use in a provisioning process, said system comprising:

means for receiving a communication from a user requesting activation of said account; and

means for activating, in response to said communication, said account to allow storage of information therein regarding a purchase made by said user, said account being accessible at a point of sale upon presentation of an identification device for provisioning of said purchase.

1/45

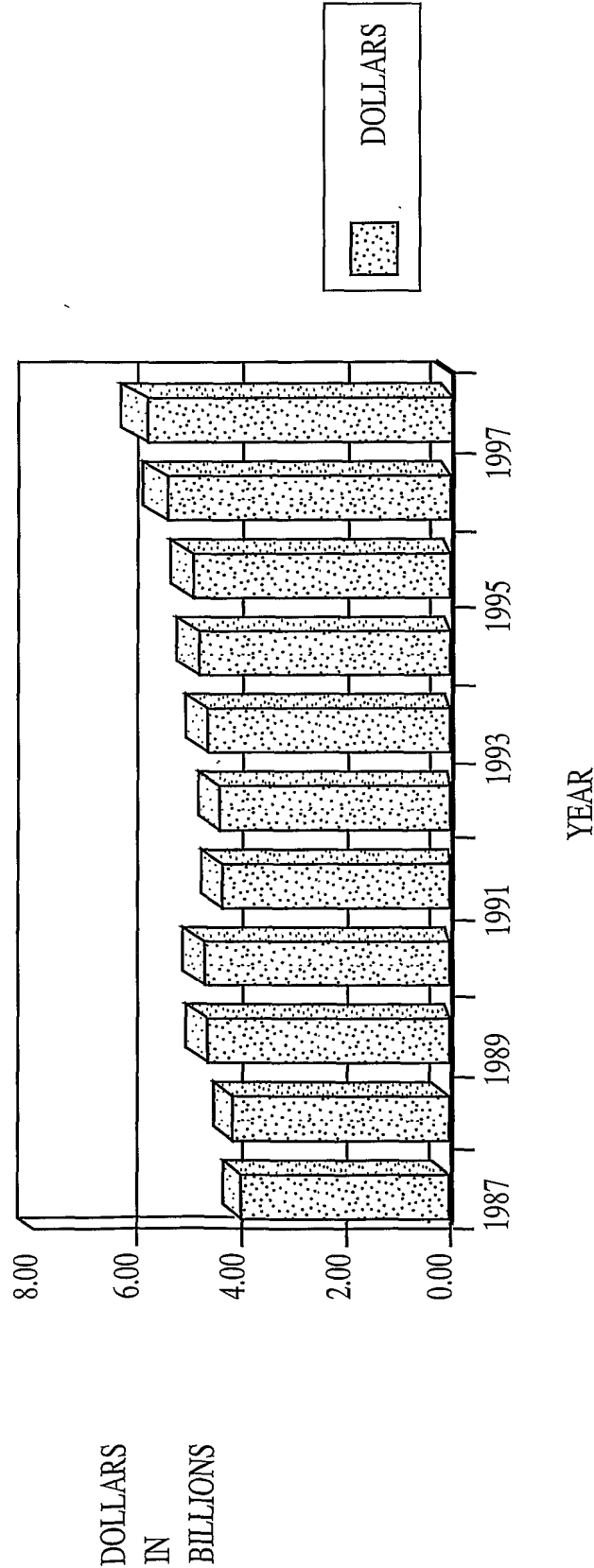


FIG. 1

2/45

YEAR	ADMISSIONS PER CAPITA	YEARLY CHANGE	1998 VERSUS
1998	5.5	5.8%	—
1997	5.2	2.7%	5.8%
1996	5.0	5.1%	8.6%
1995	4.8	-3.2%	14.1%
1994	5.0	2.8%	10.5%
1993	4.8	4.9%	13.6%
1992	4.6	1.7%	19.2%
1991	4.5	-5.1%	21.2%
1990	4.8	—	15.1%
1985	4.4	—	23.5%
1980	4.5	—	22.0%

FIG. 2

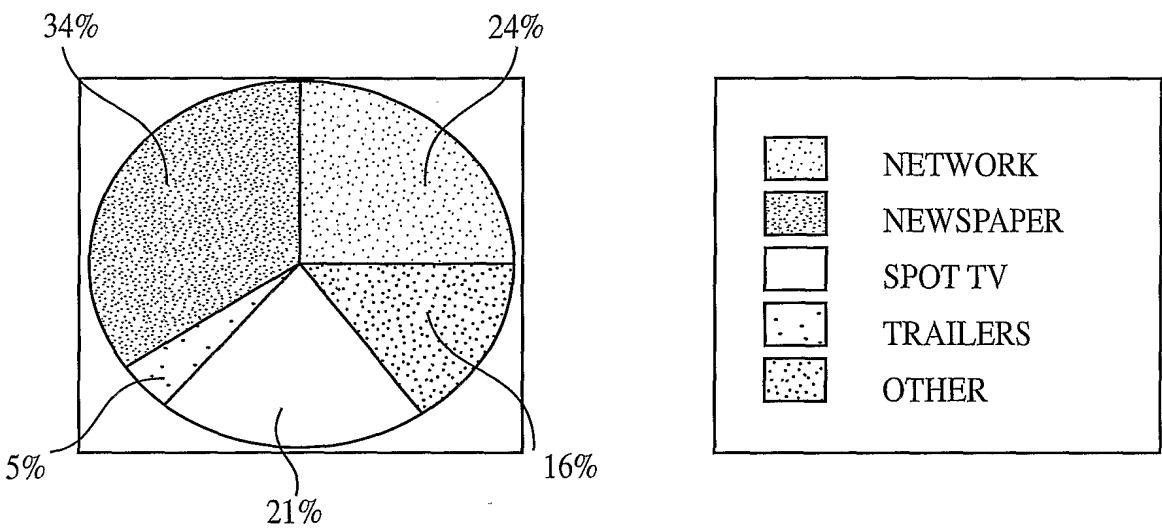
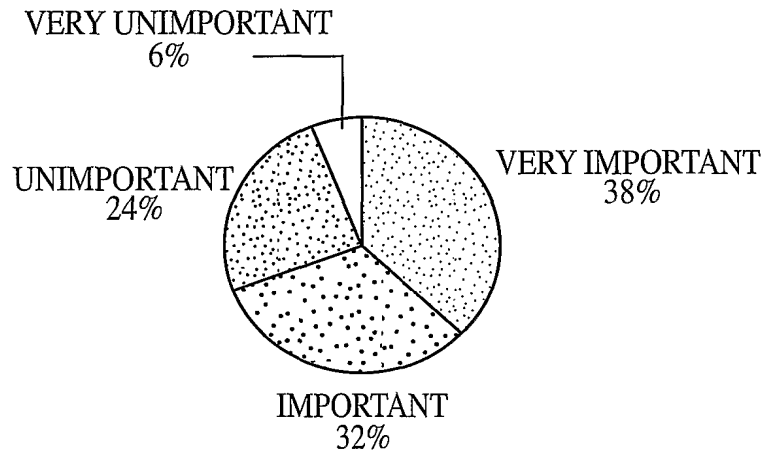


FIG. 3

4/45

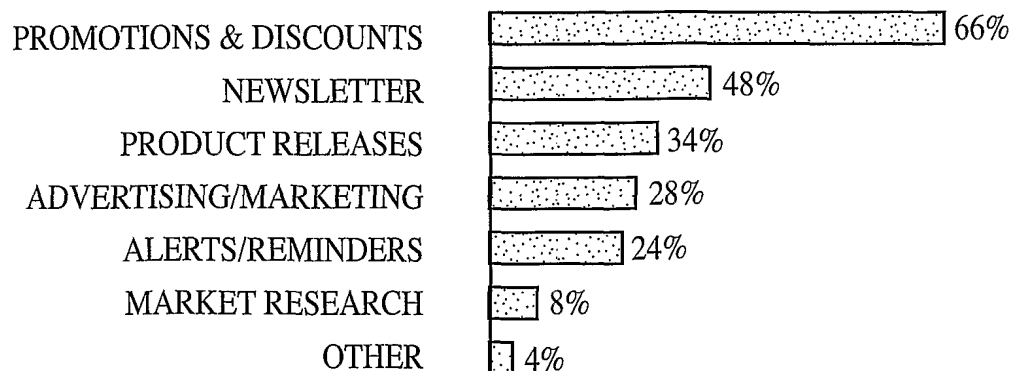
"HOW IMPORTANT IS E-MAIL TO YOUR SALES AND MARKETING STRATEGY?"



PERCENT OF 50 COMPANIES INTERVIEWED

FIG. 4a

"WHAT ARE YOU USING OUTBOUND E-MAIL FOR?"

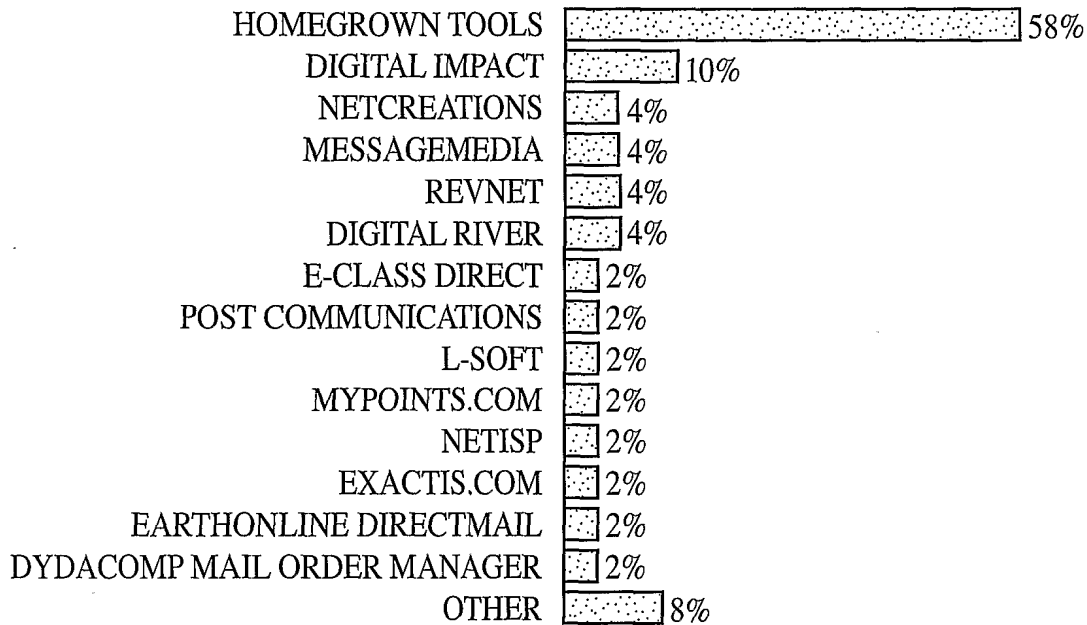


PERCENT OF 50 COMPANIES INTERVIEWED
(MULTIPLE RESPONSES ACCEPTED)

FIG. 4b

5/45

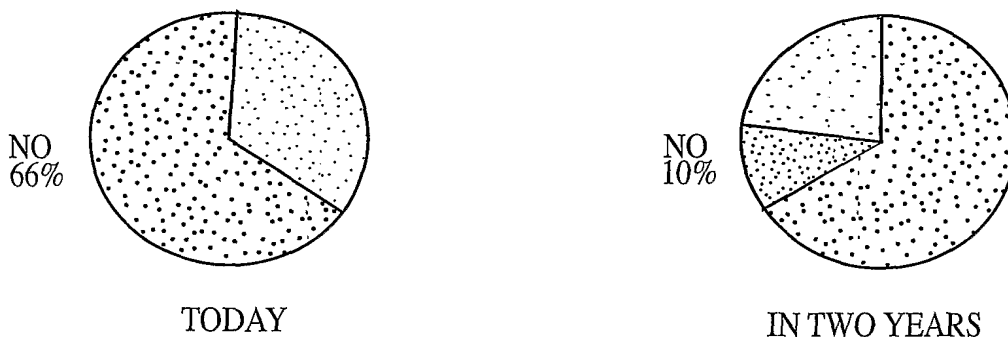
"WHAT TOOLS OR OUTSOURCES ARE YOU USING FOR
OUTBOUND E-MAIL CAMPAIGNS?"



PERCENT OF 50 COMPANIES INTERVIEWED
(MULTIPLE RESPONSES ACCEPTED)

FIG. 4c

"ARE YOU USING HTML E-MAIL?"



PERCENT OF 50 COMPANIES INTERVIEWED

FIG. 4d

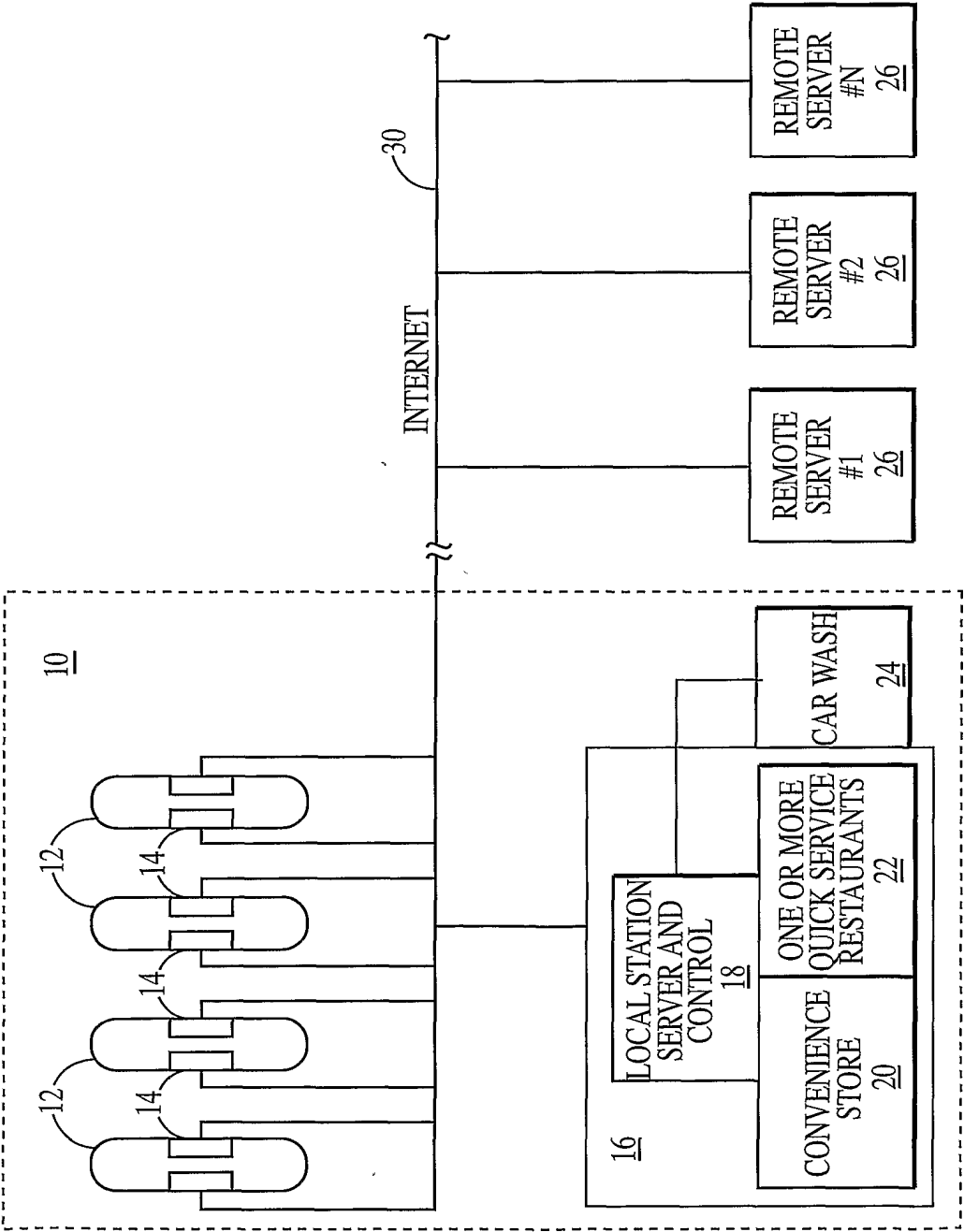


FIG. 5
PRIOR ART

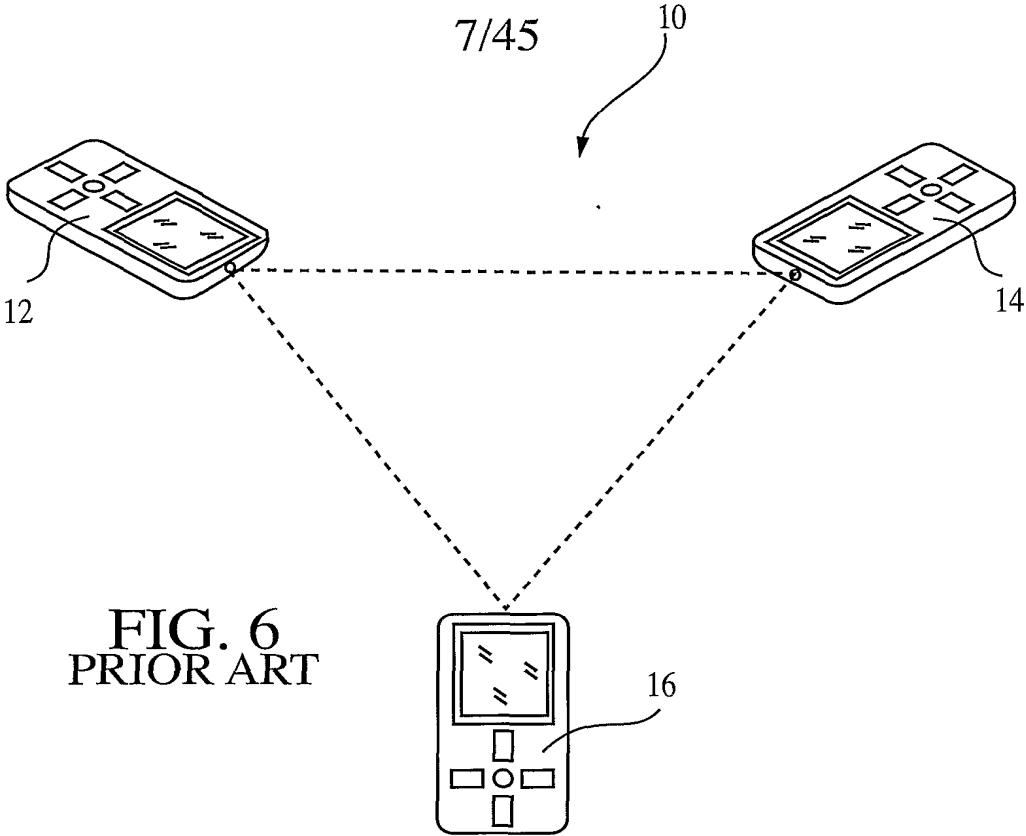


FIG. 6
PRIOR ART

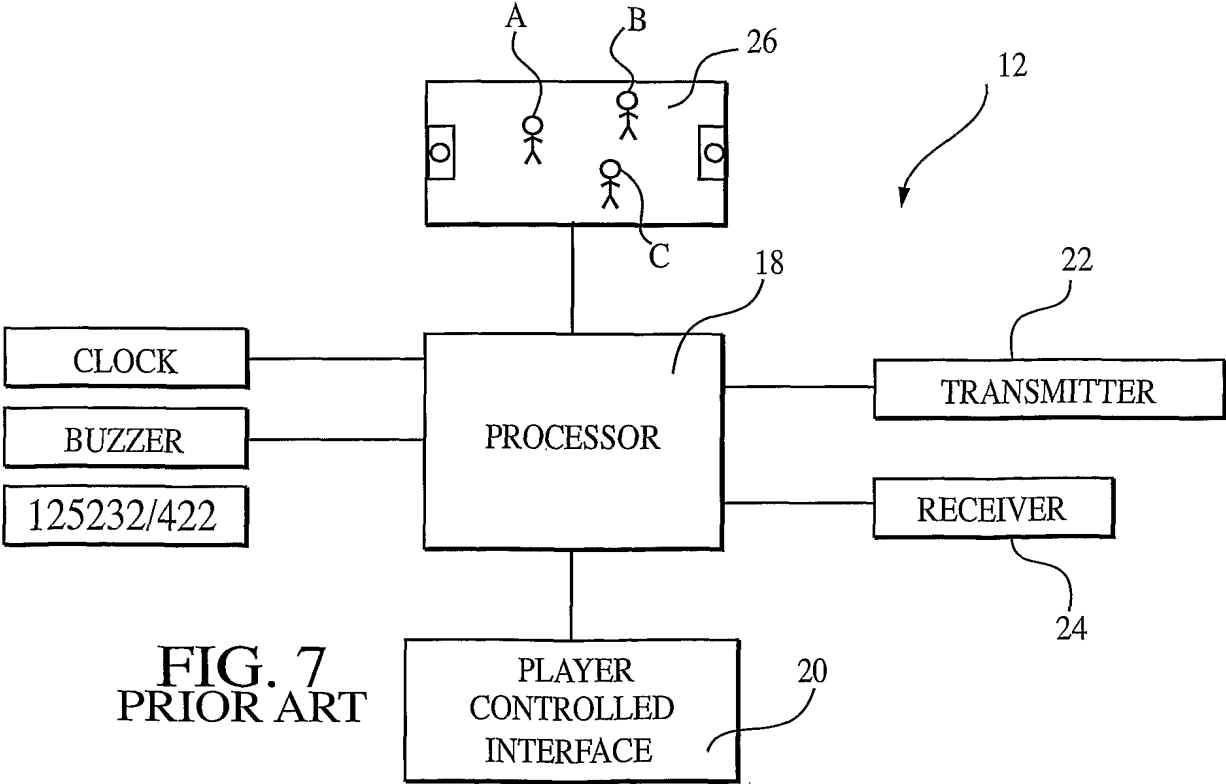
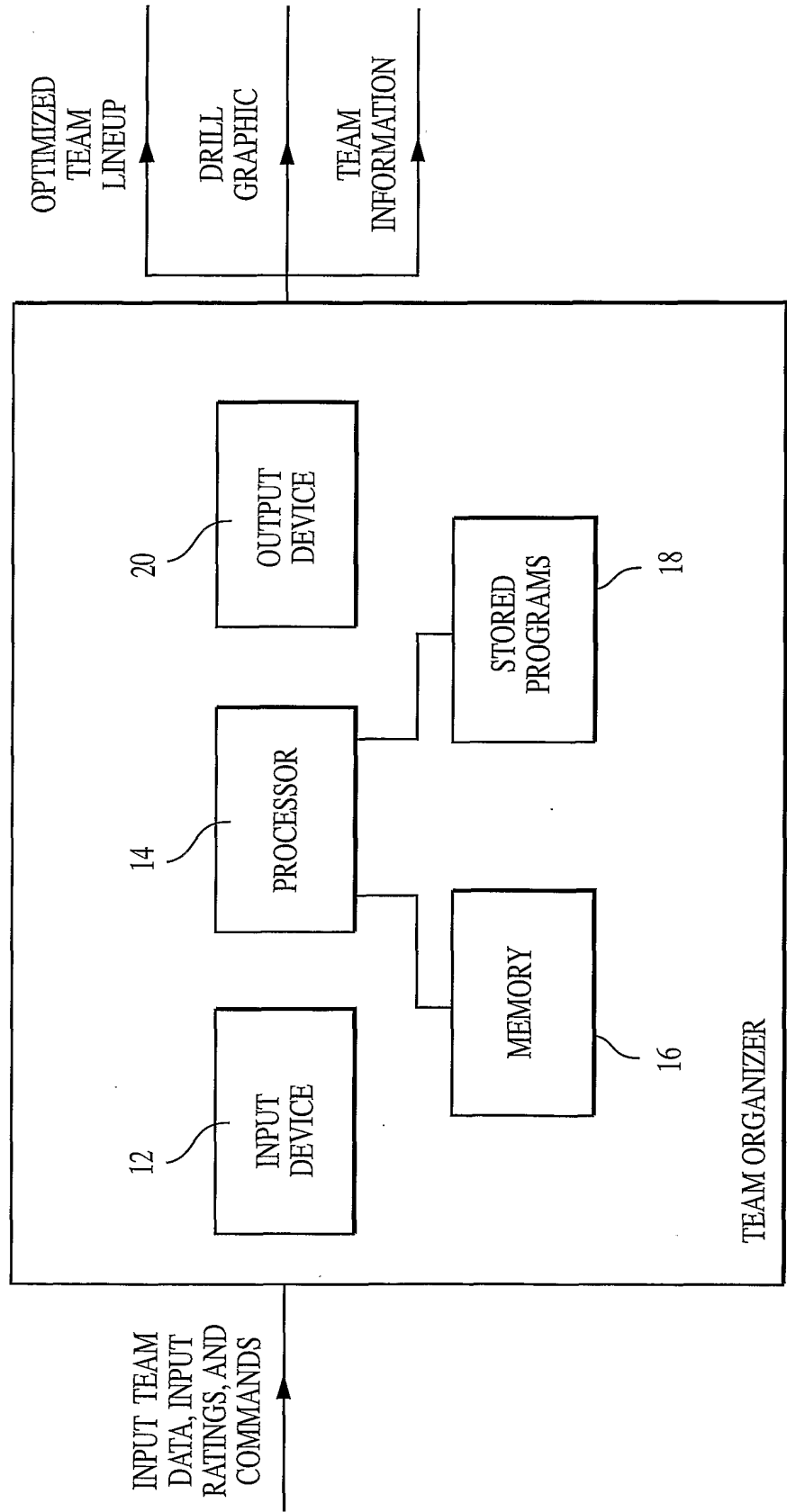


FIG. 7
PRIOR ART

8/45



10

FIG. 8
PRIOR ART

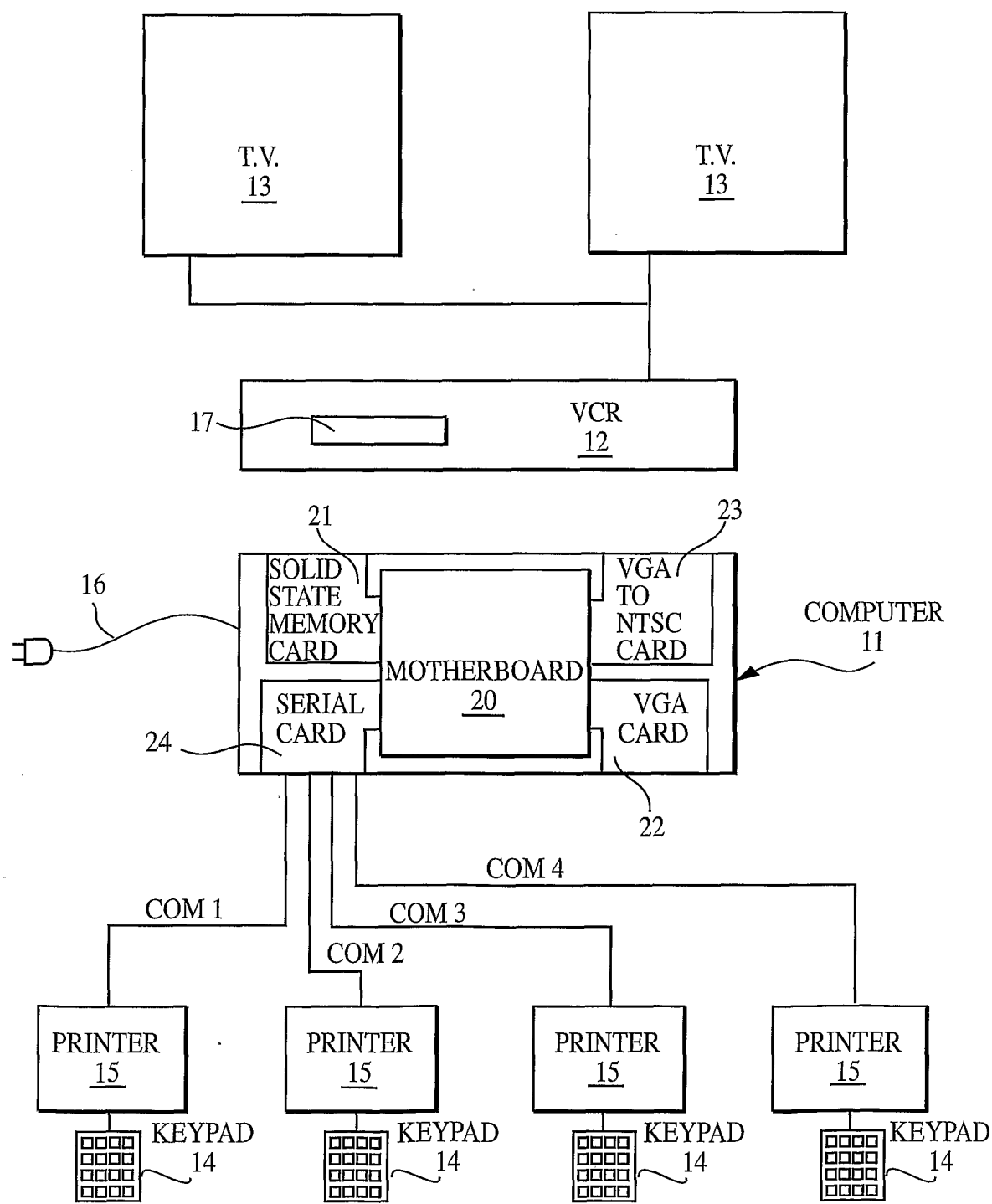


FIG. 9
PRIOR ART

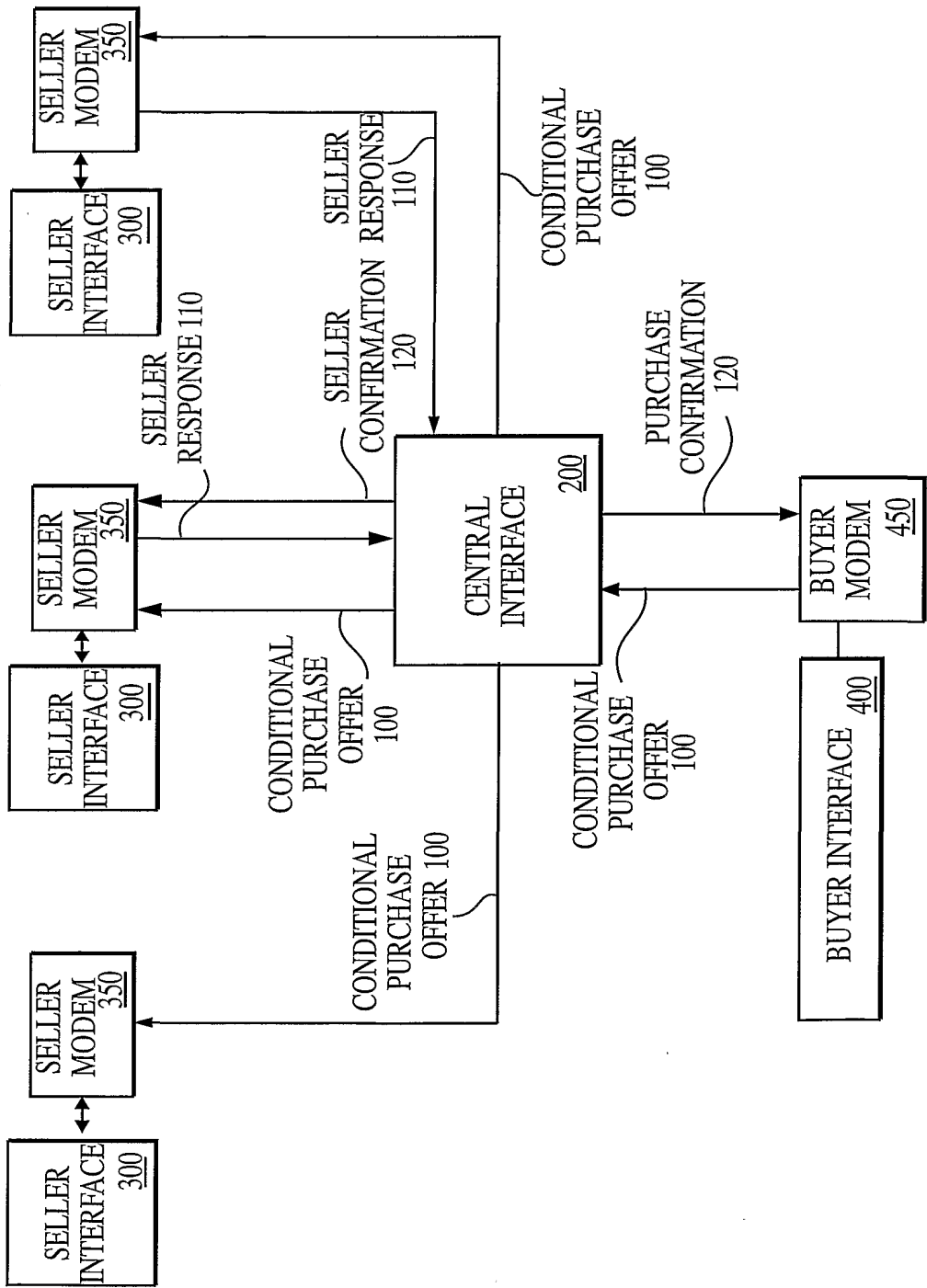
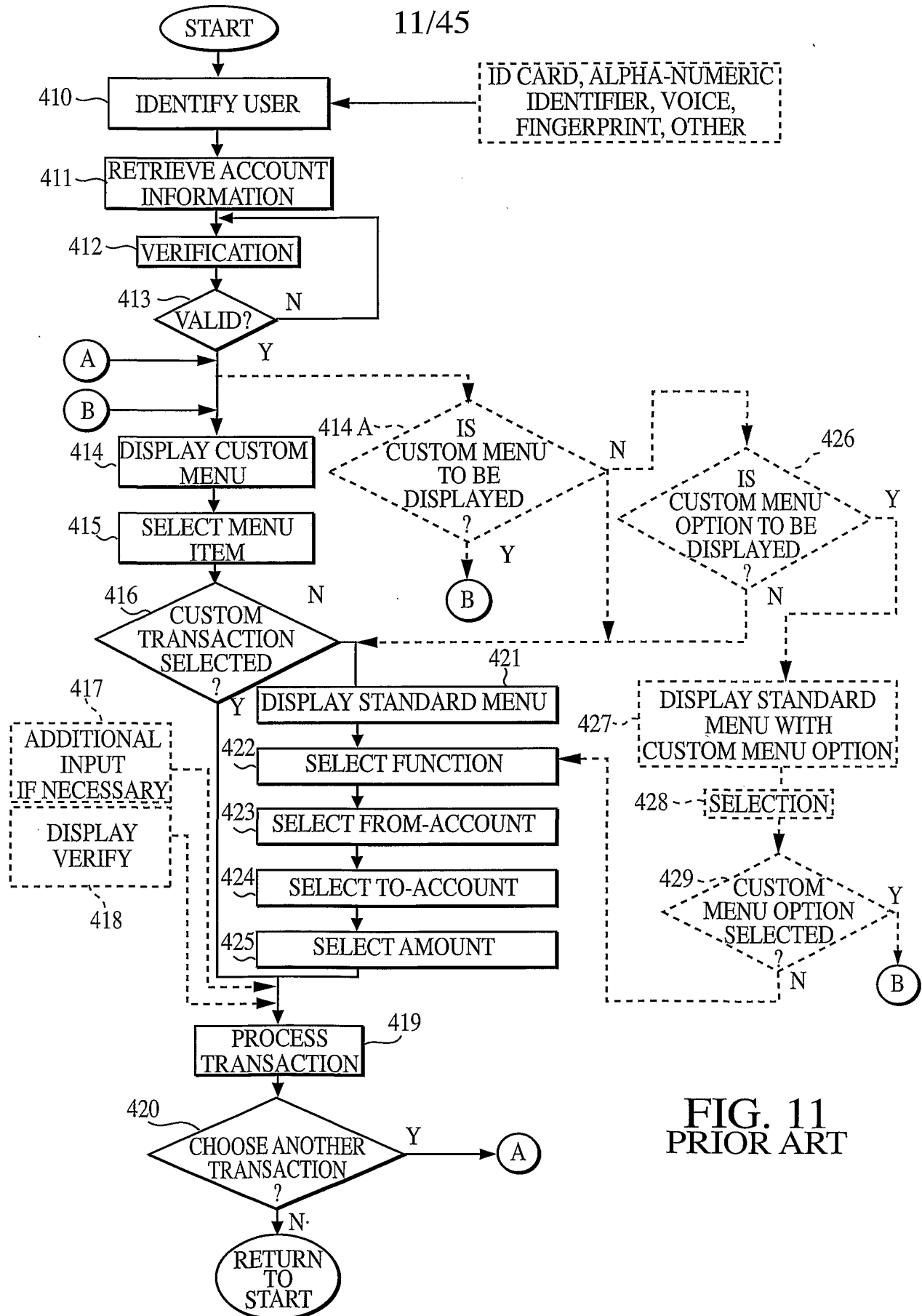


FIG. 10
PRIOR ART

FIG. 11
PRIOR ART

12/45

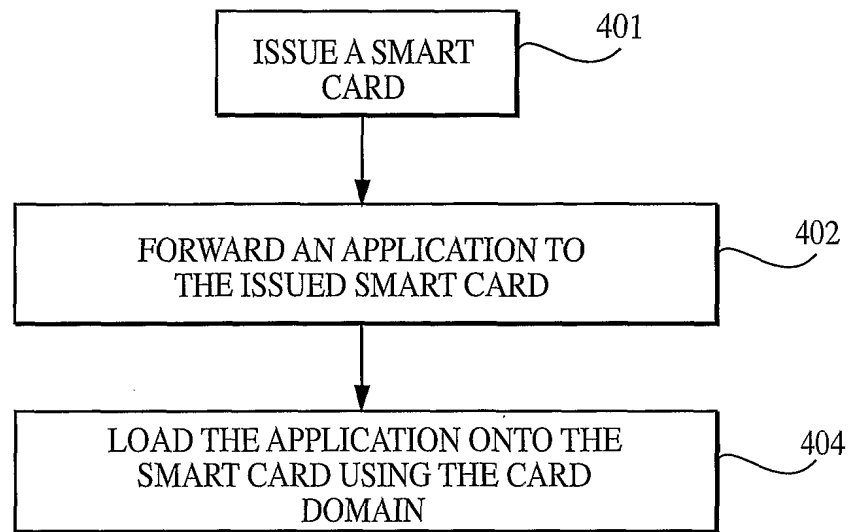


FIG. 12
PRIOR ART

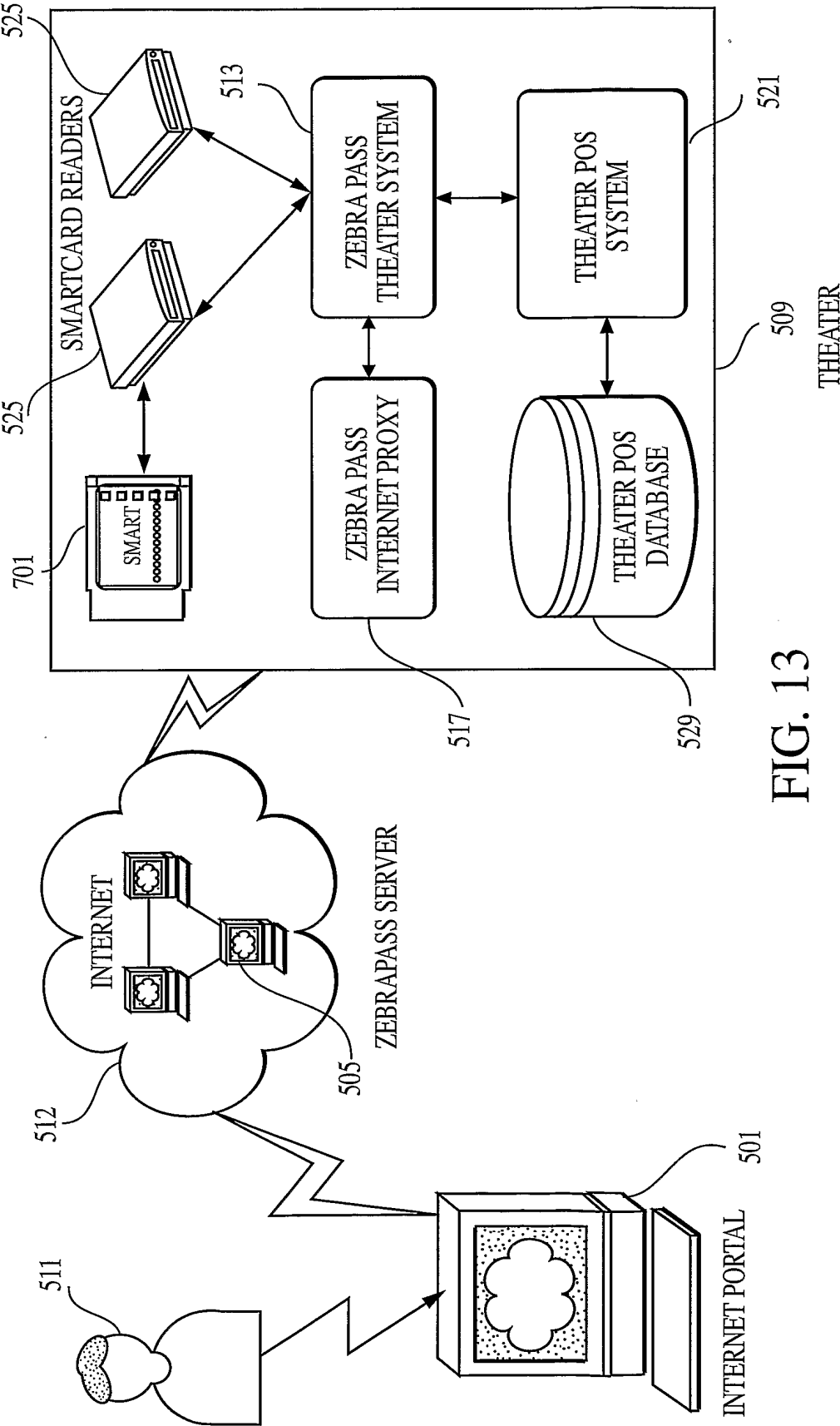


FIG. 13

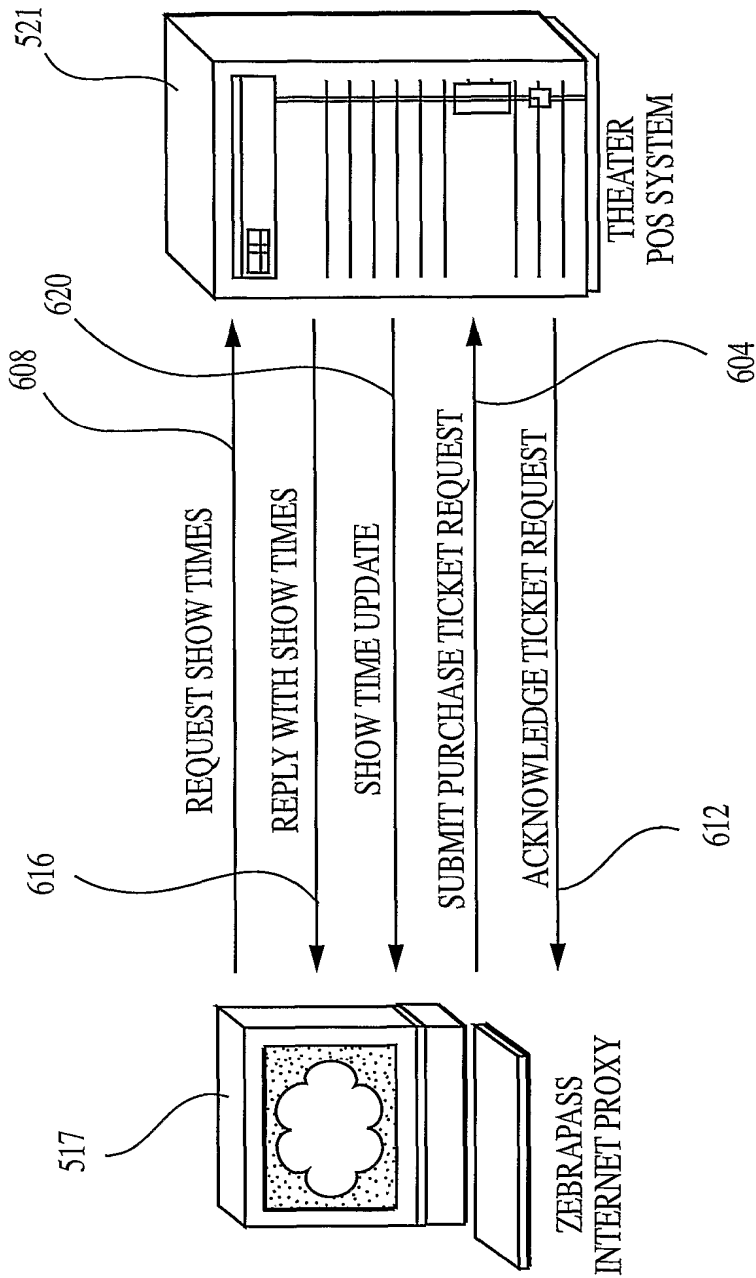


FIG. 14

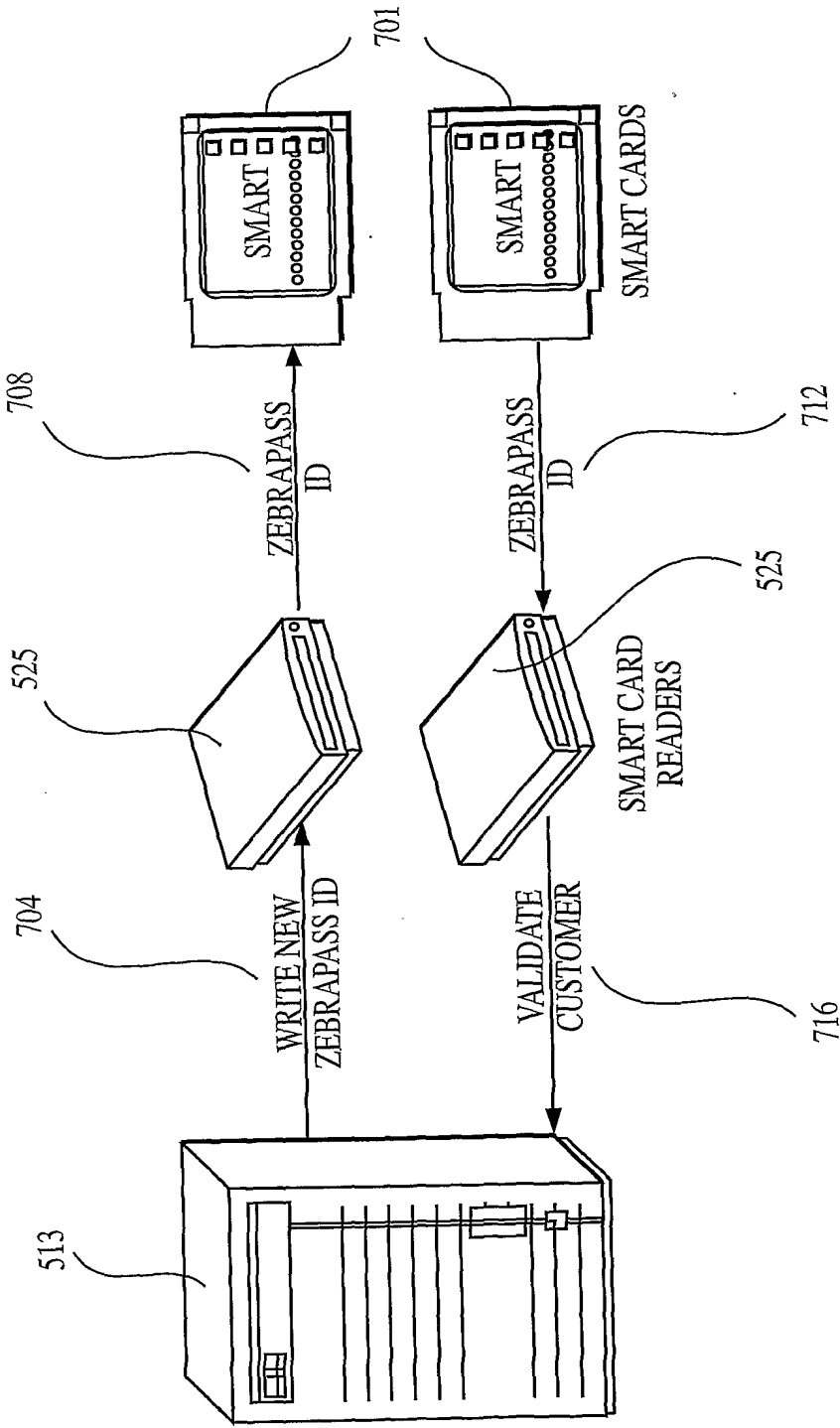


FIG. 15

ZEBRA PASS
THEATER SYSTEM

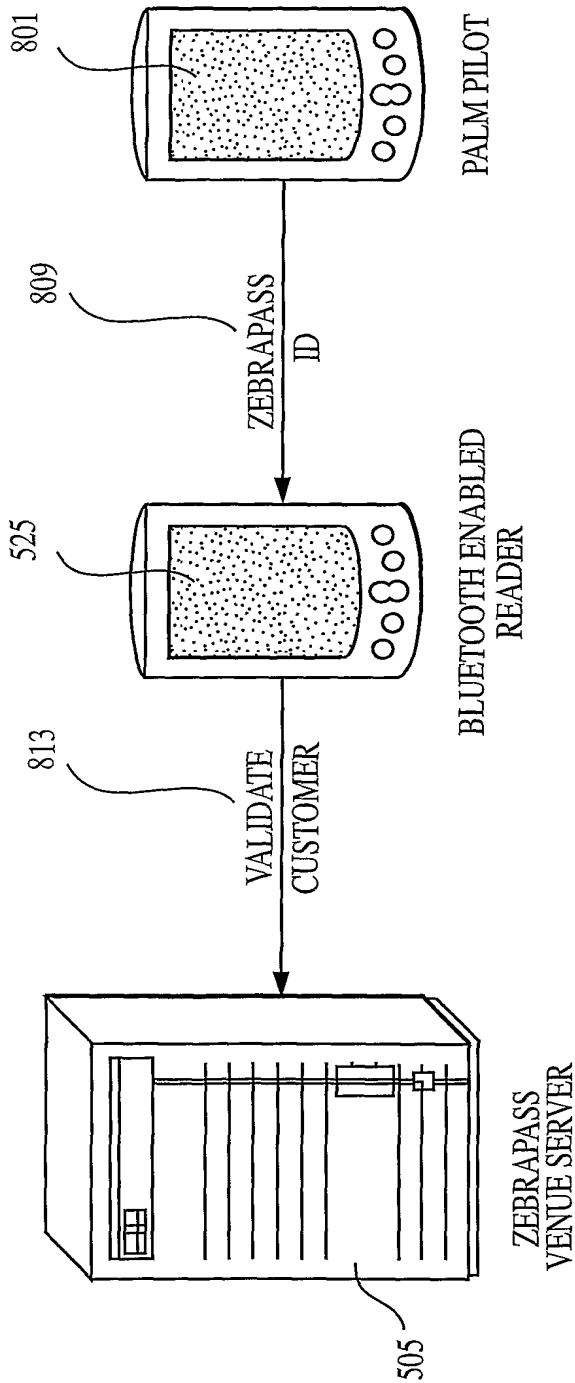


FIG. 16

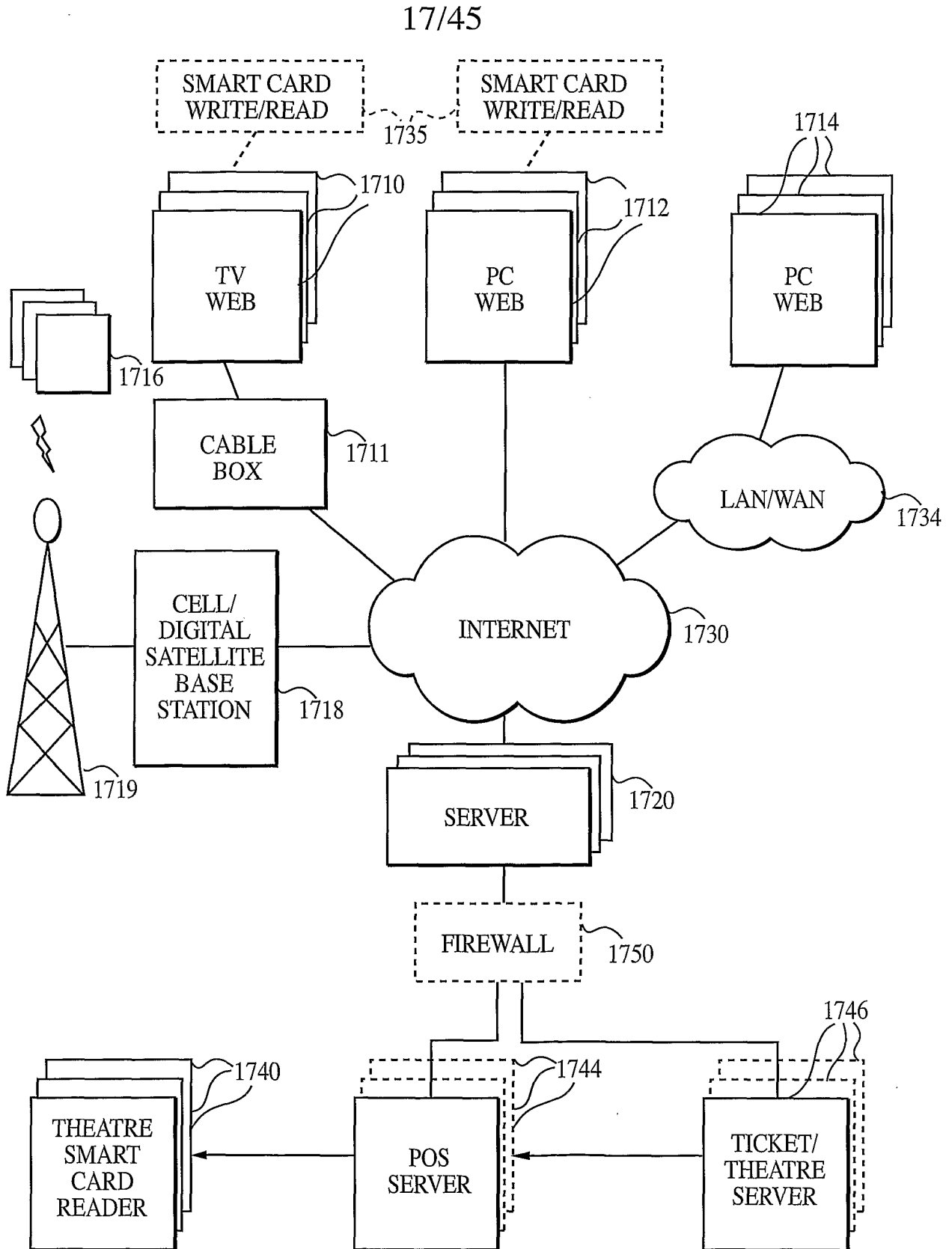


FIG. 17
SUBSTITUTE SHEET (RULE 26)

18/45

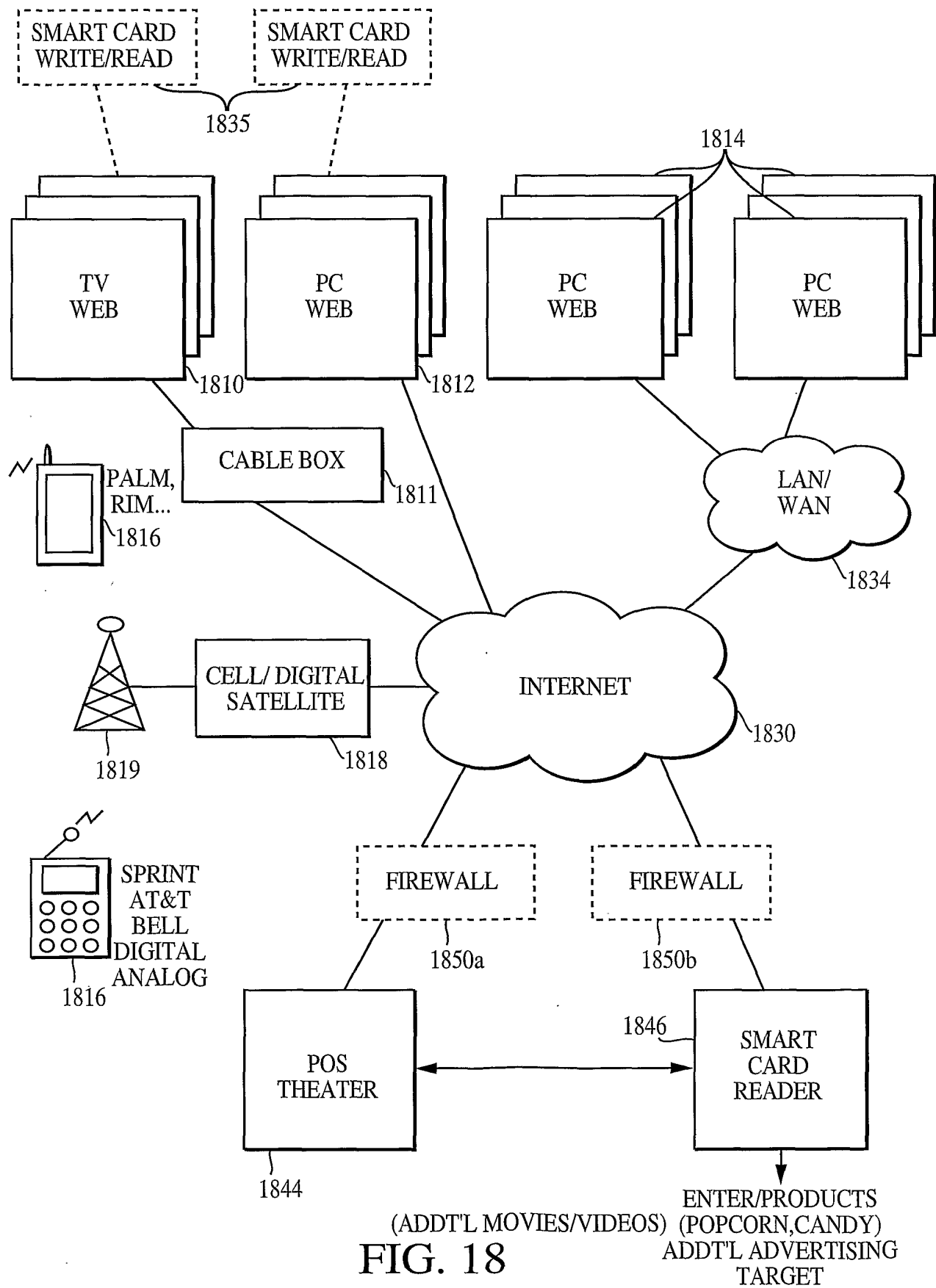


FIG. 18

ENTER/PRODUCTS
S) (POPCORN,CANDY)
ADDT'L ADVERTISING
TARGET

19/45

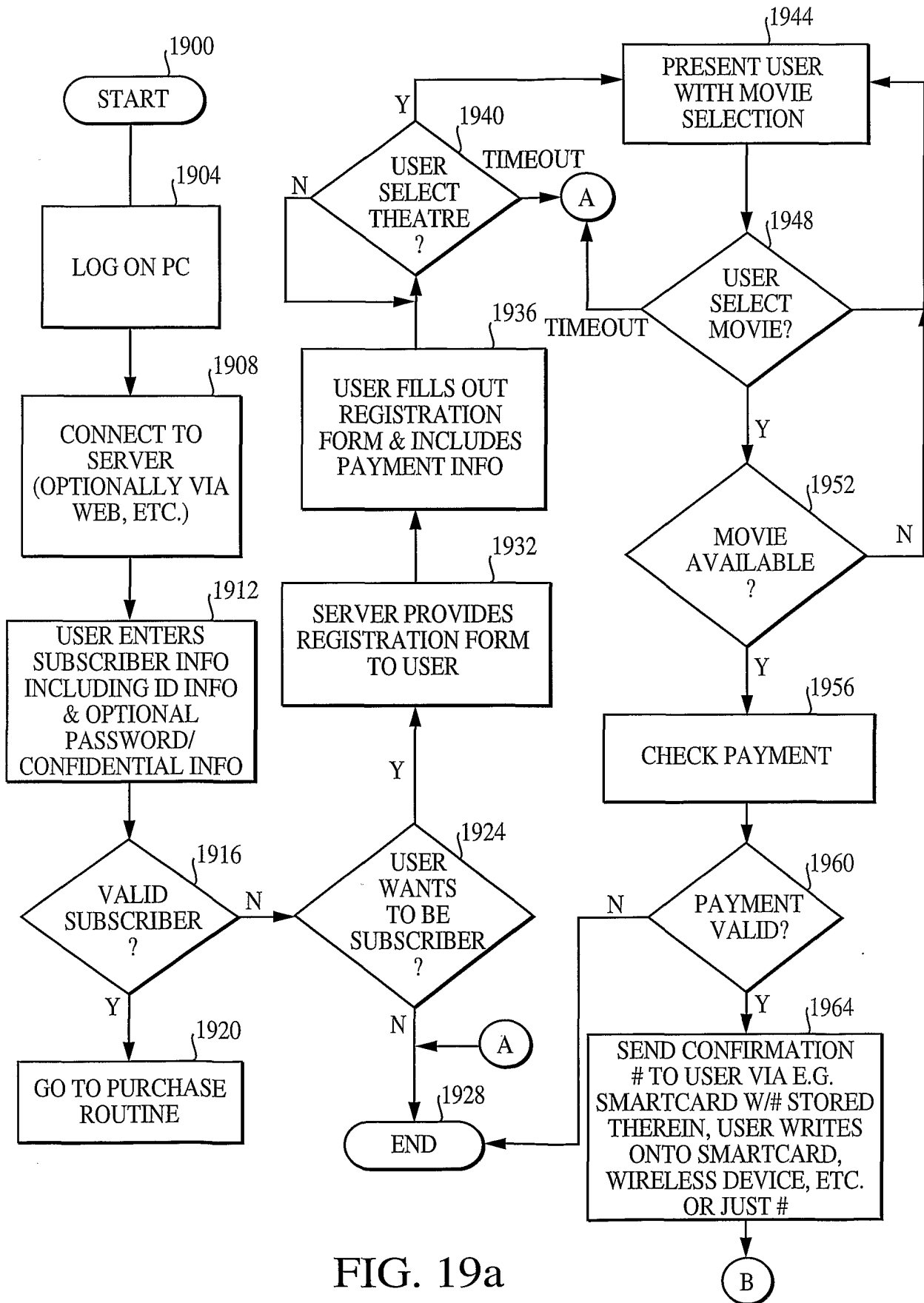


FIG. 19a

20/45

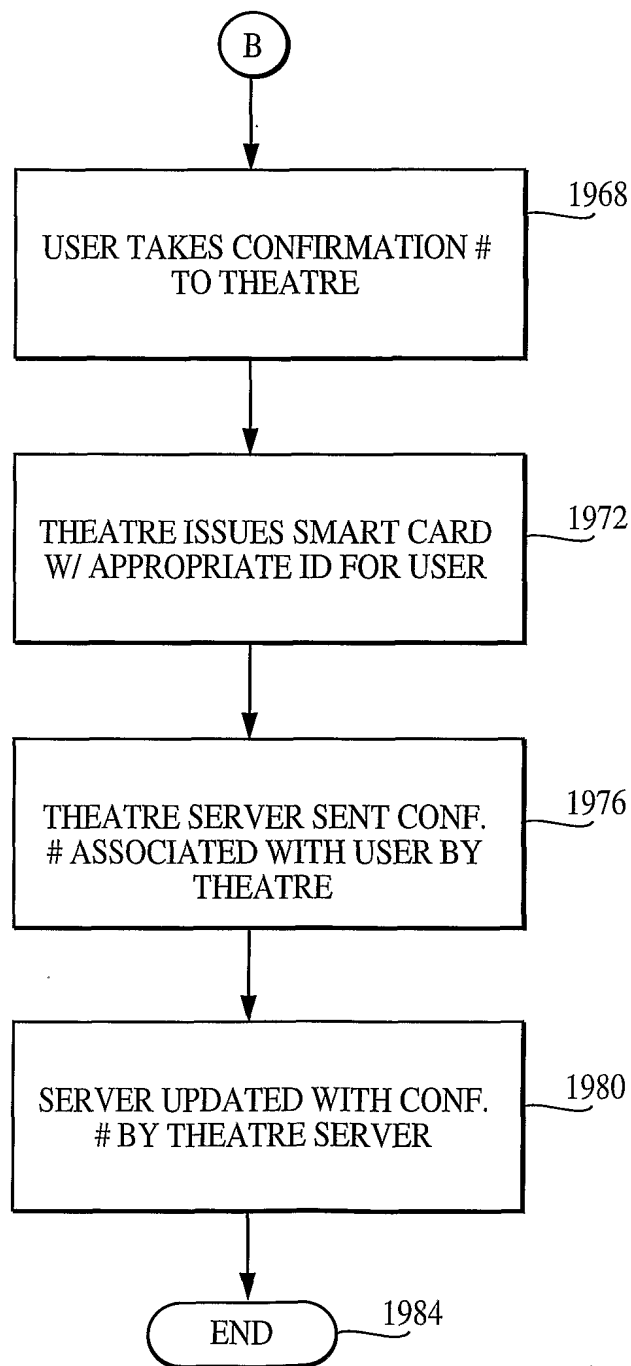


FIG. 19b

21/45

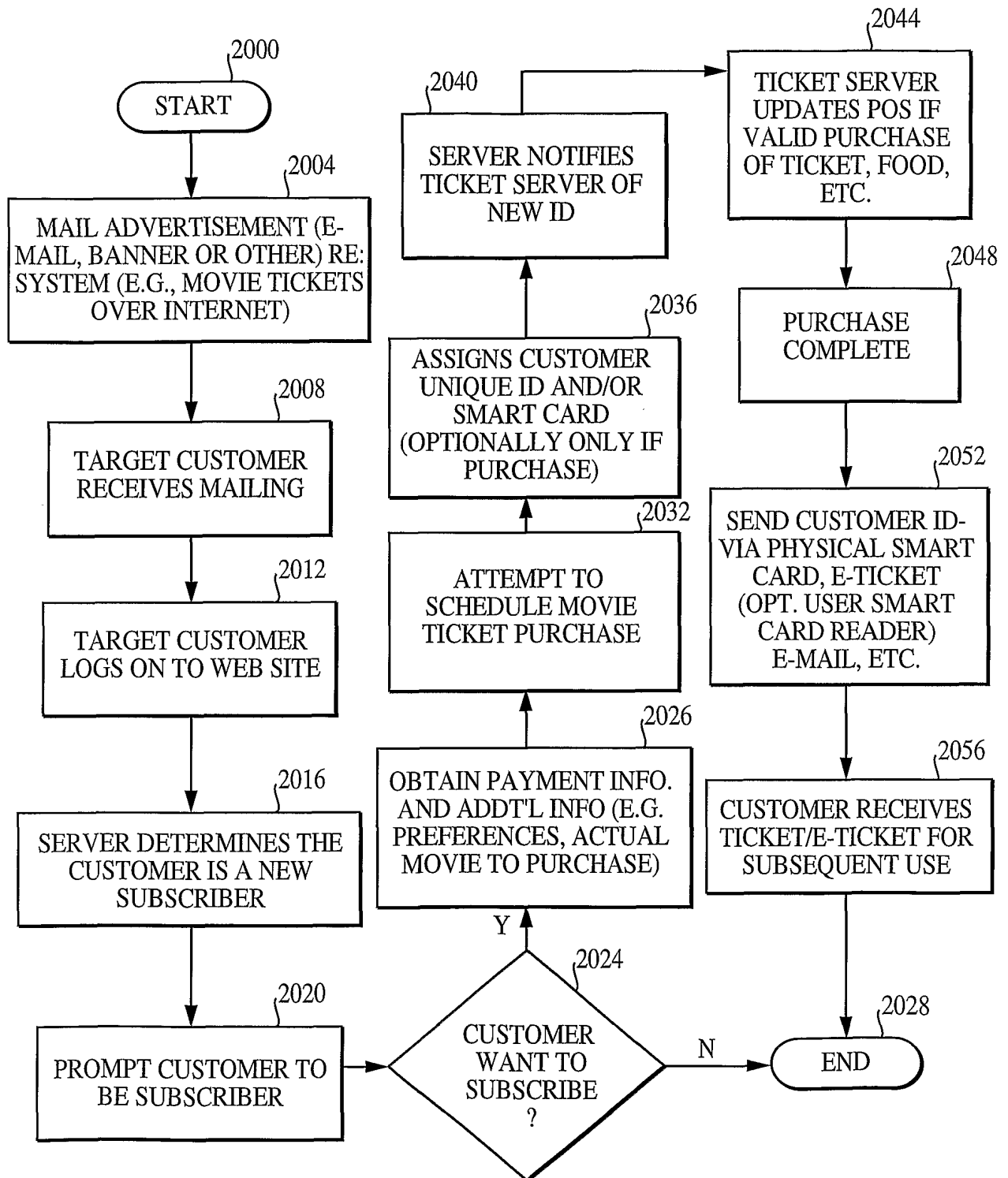


FIG. 20

22/45

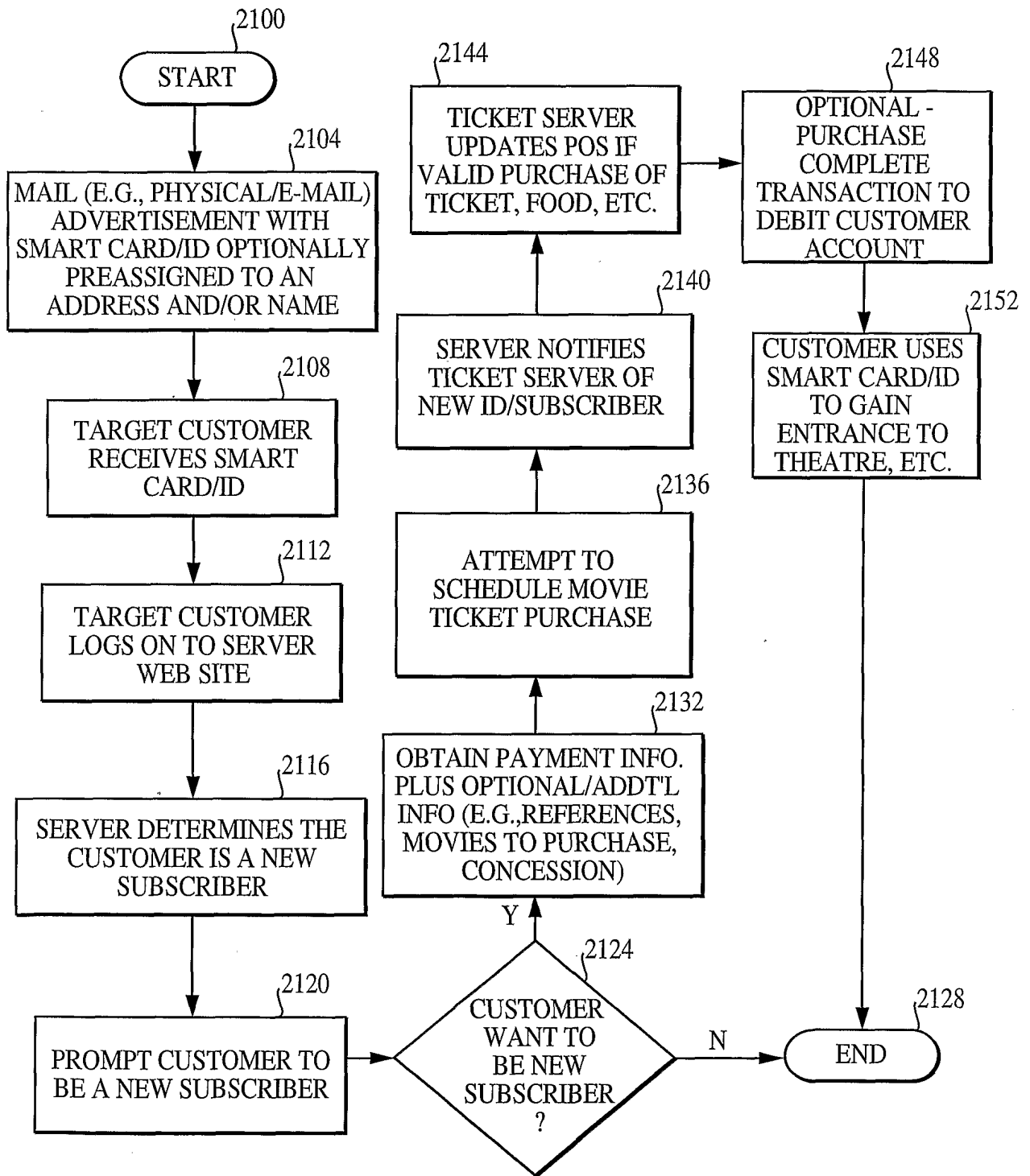


FIG. 21

23/45

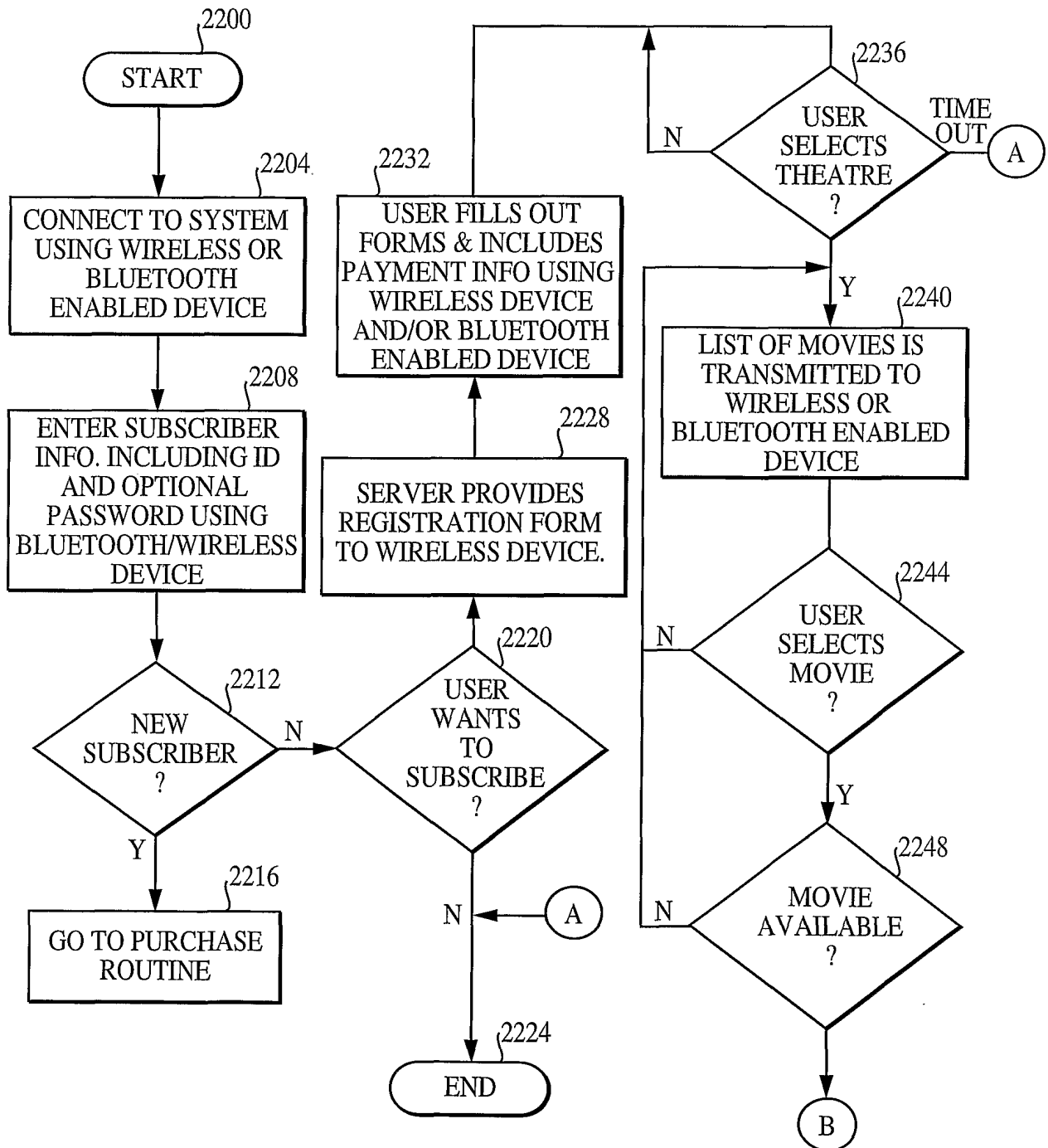


FIG. 22a

24/45

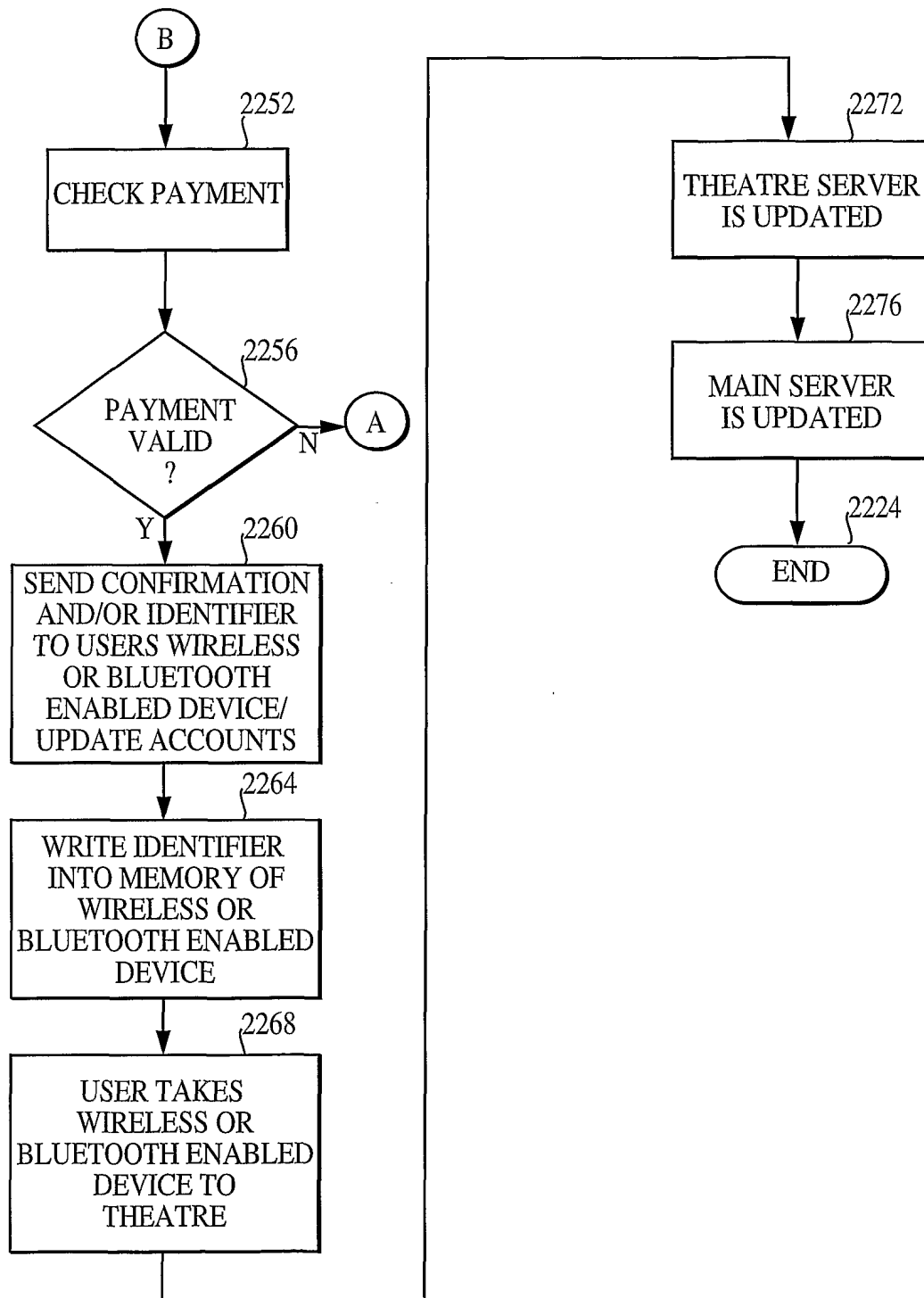


FIG. 22B

25/45

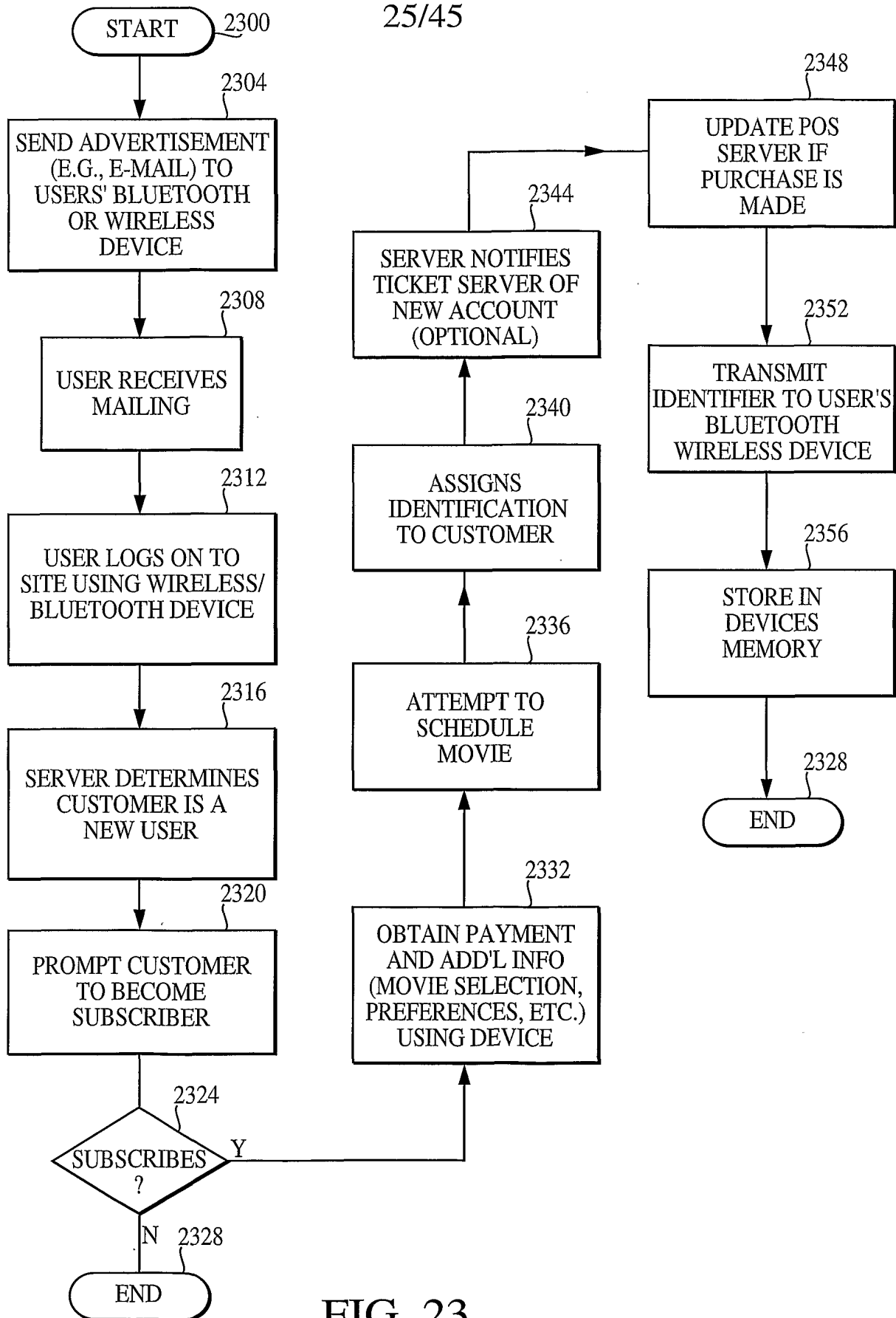


FIG. 23

26/45

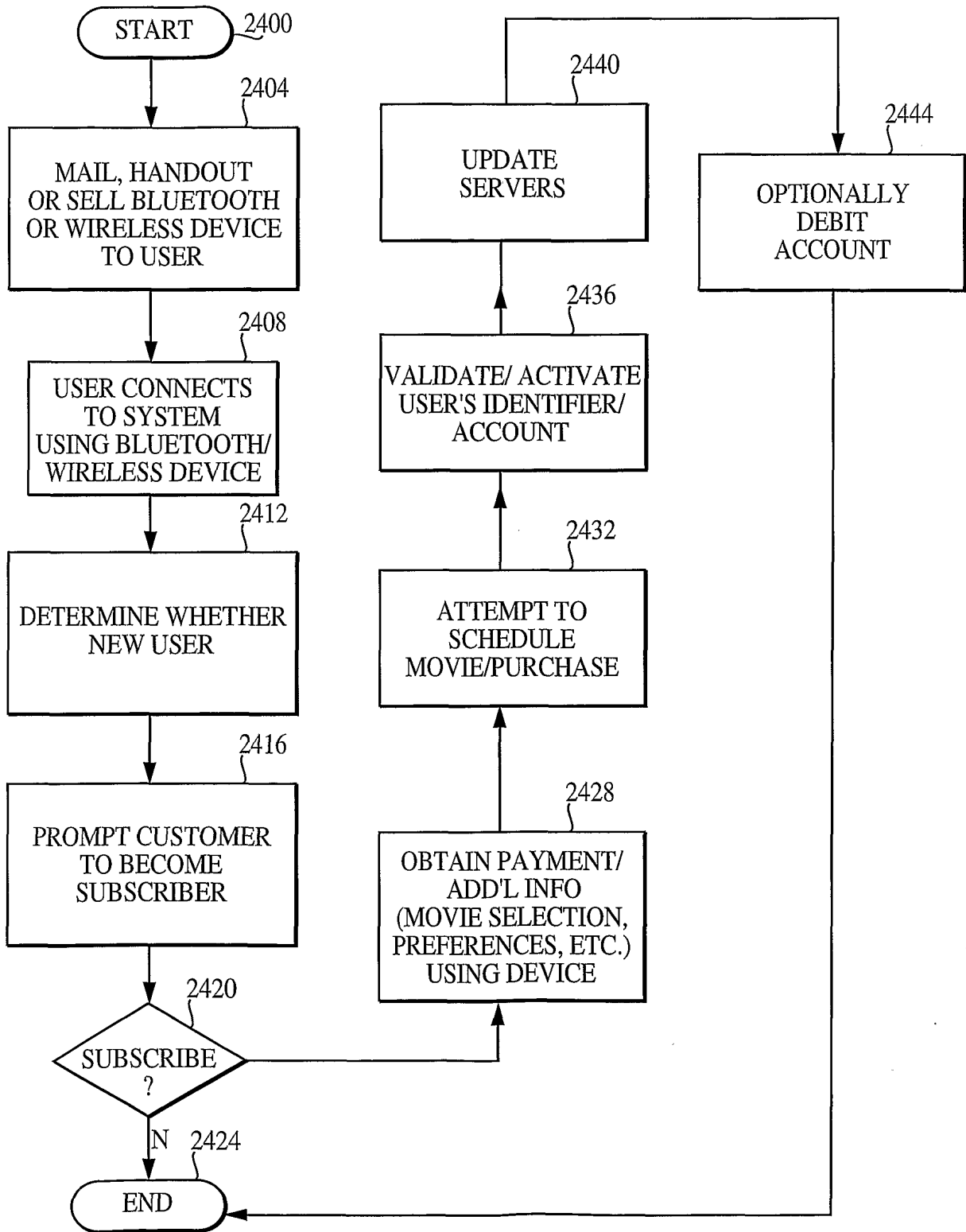


FIG. 24

27/45

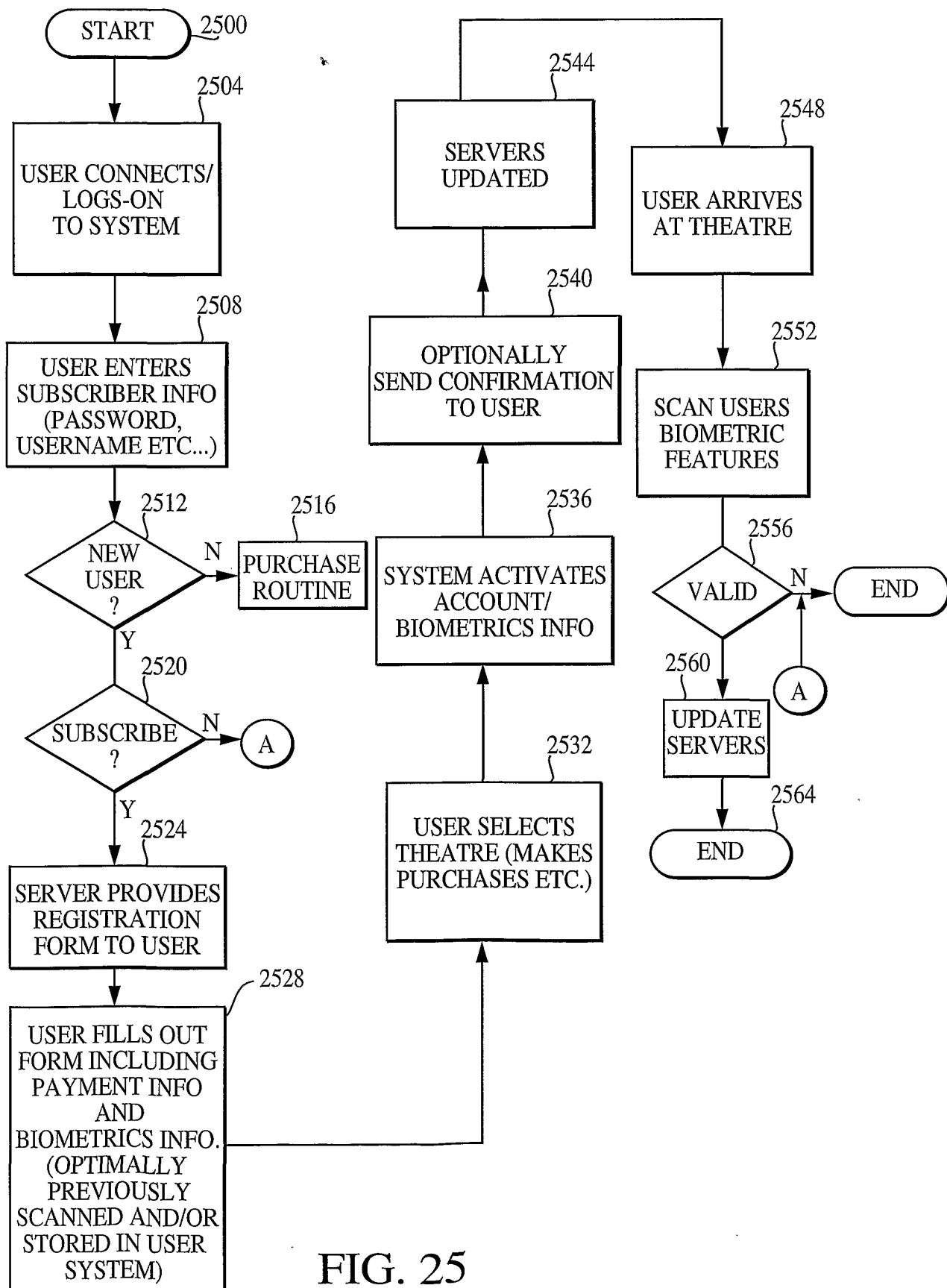


FIG. 25

28/45

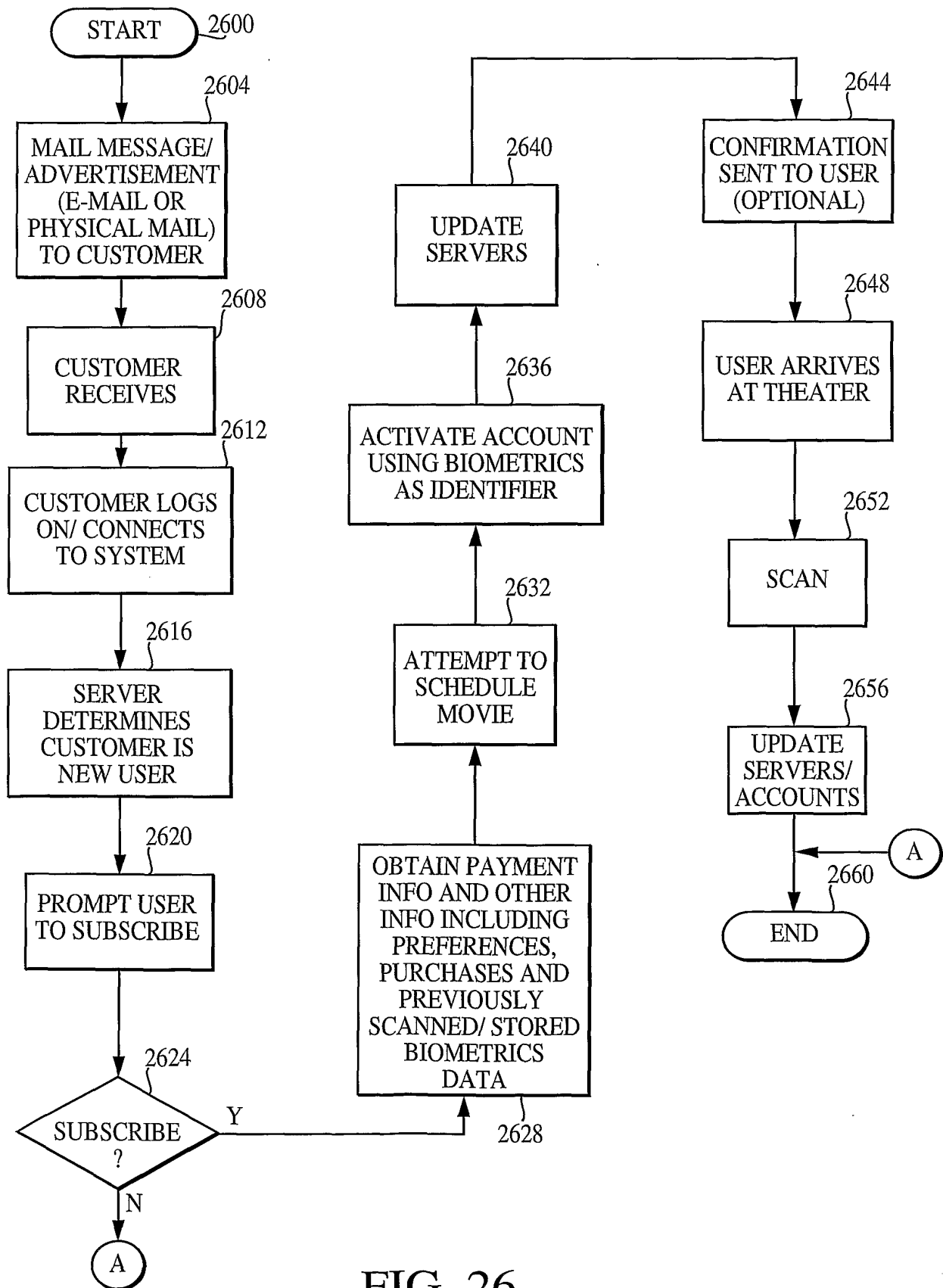


FIG. 26

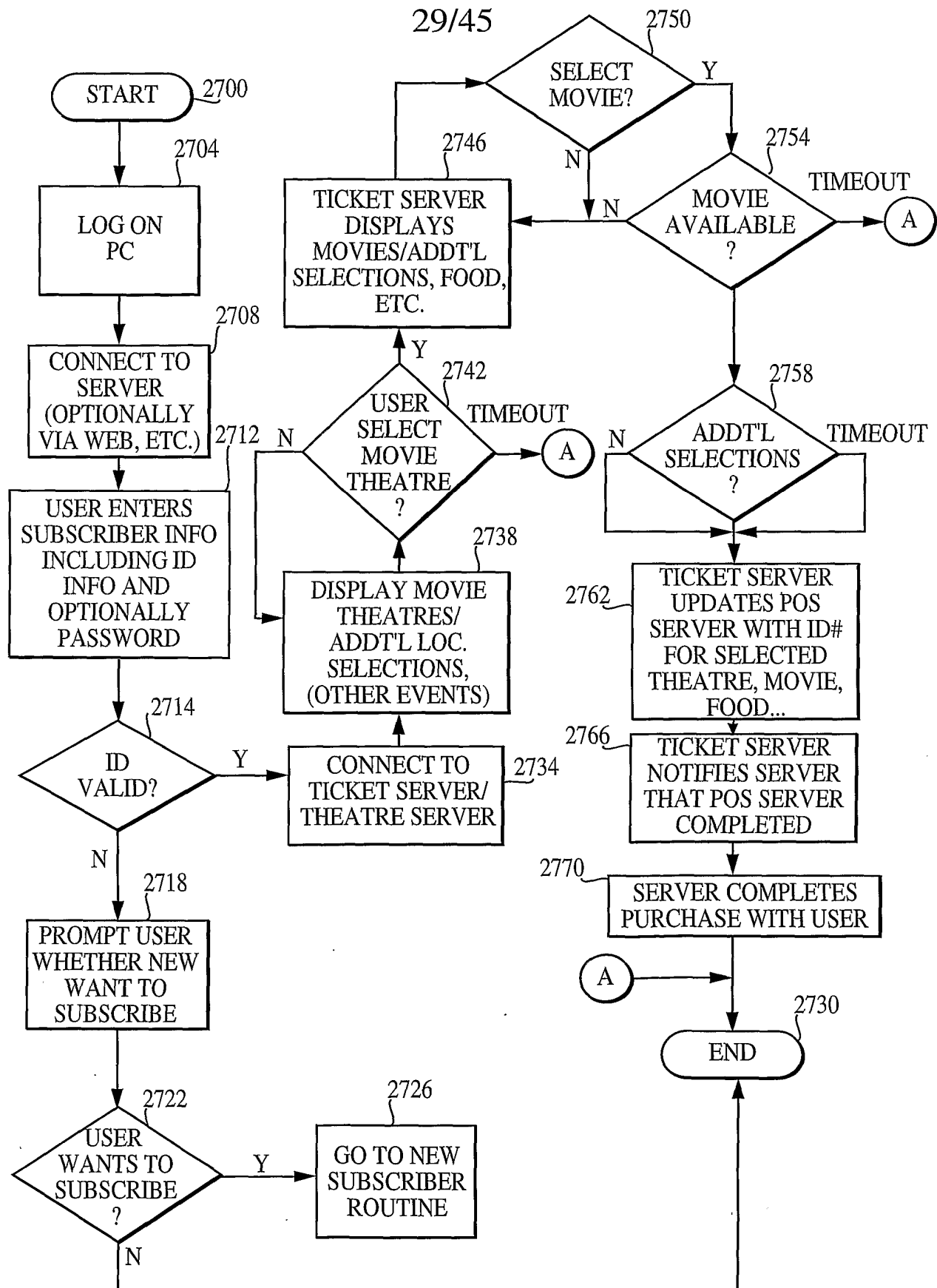


FIG. 27

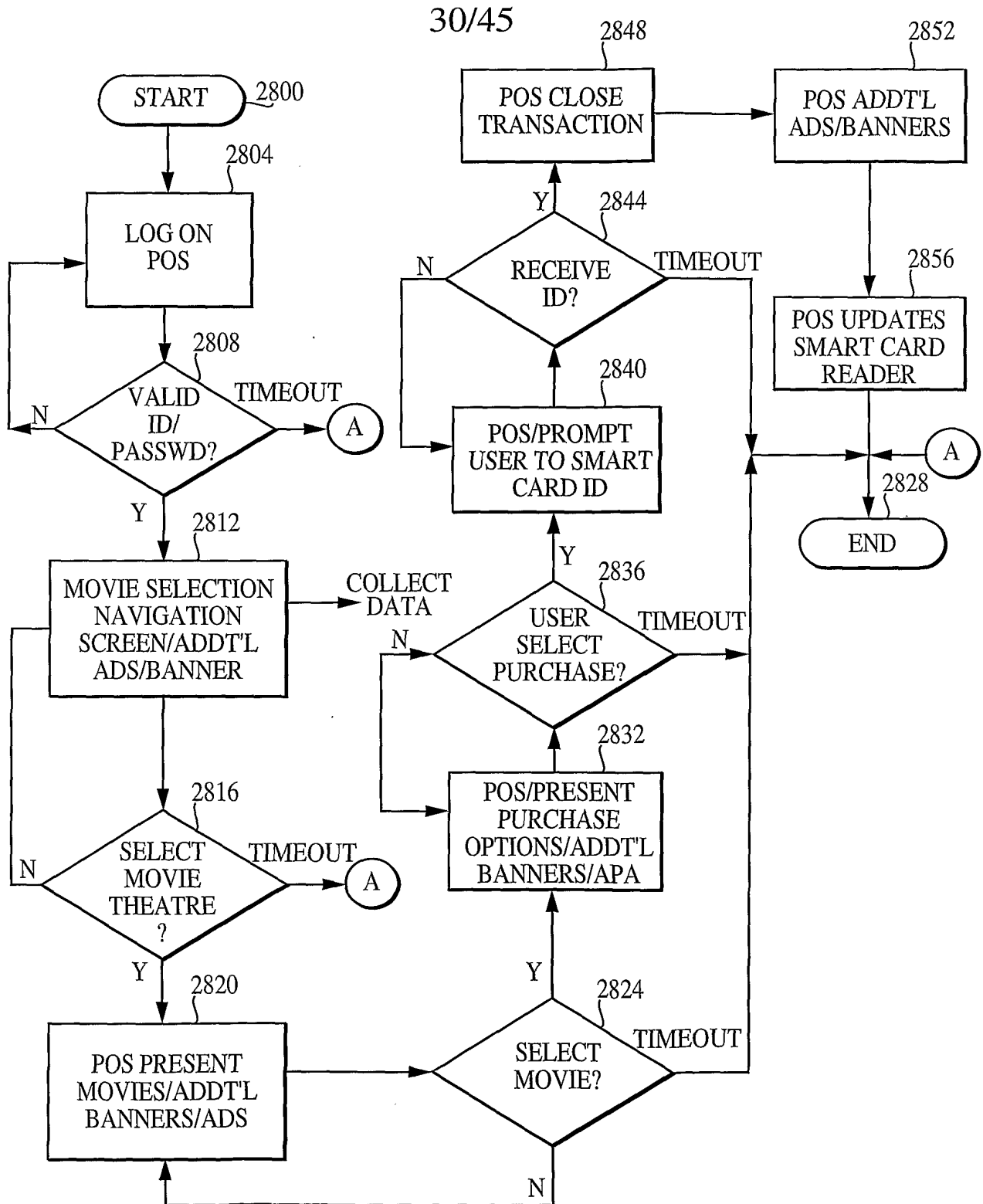


FIG. 28

31/45

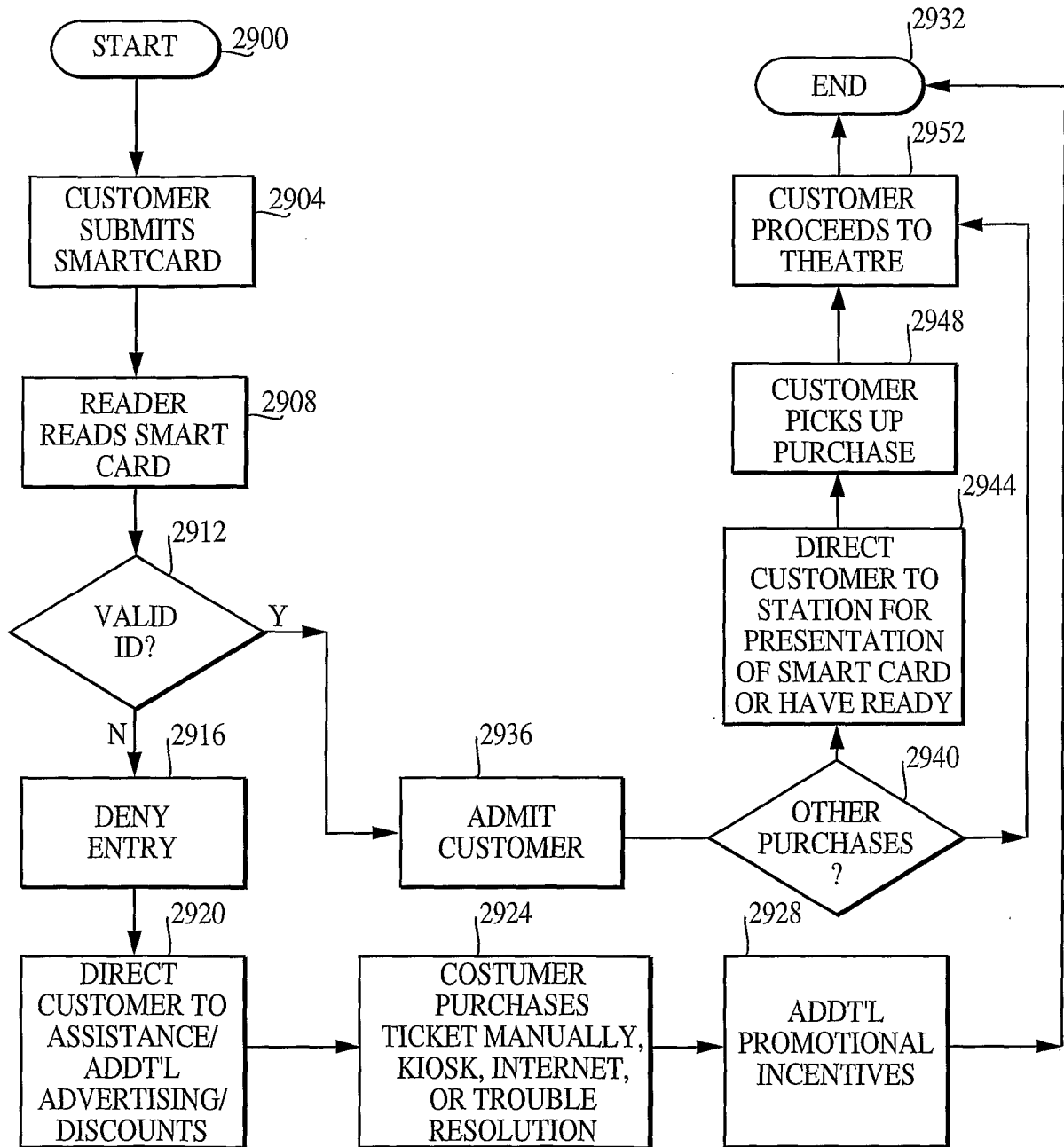


FIG. 29

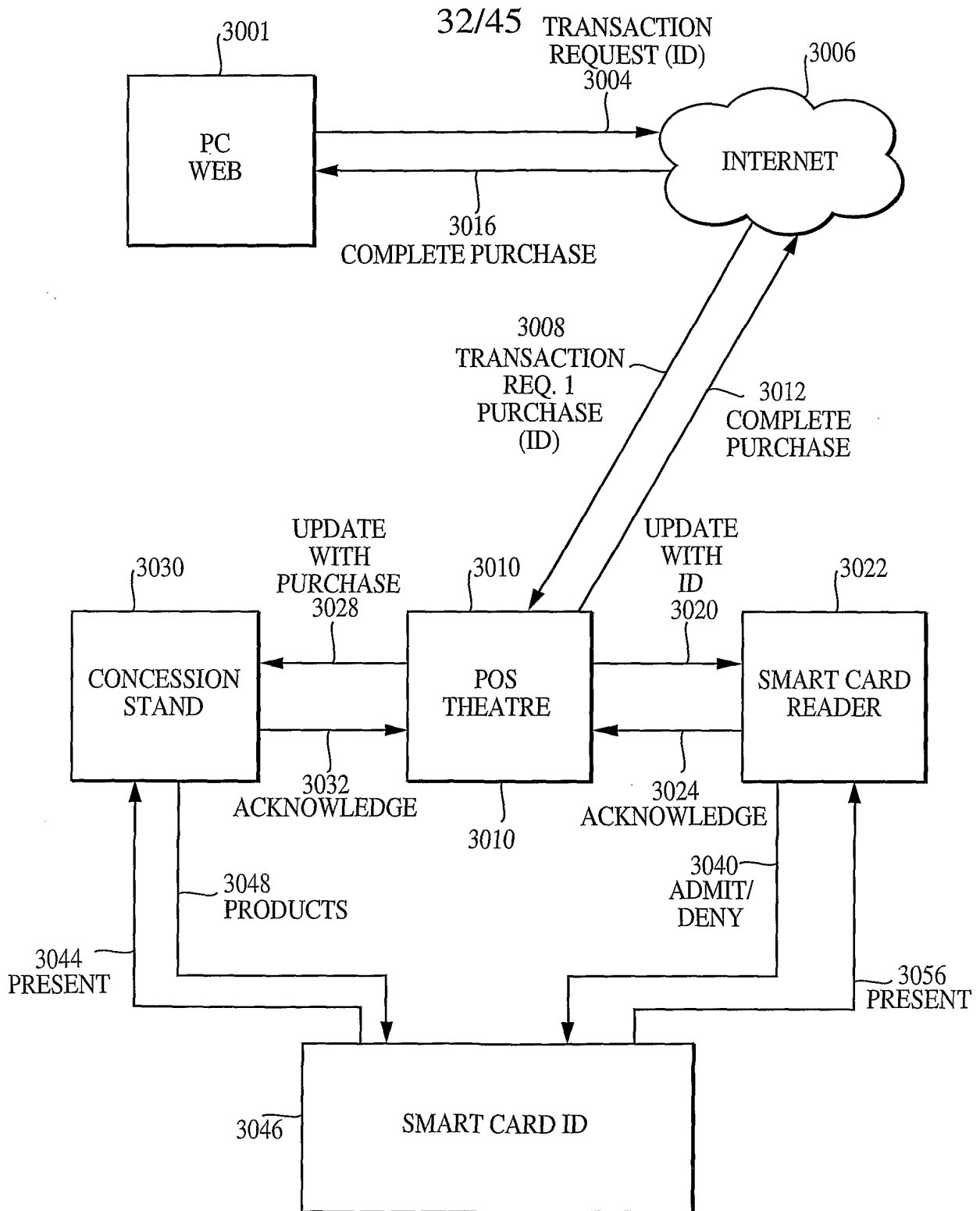


FIG. 30

33/45

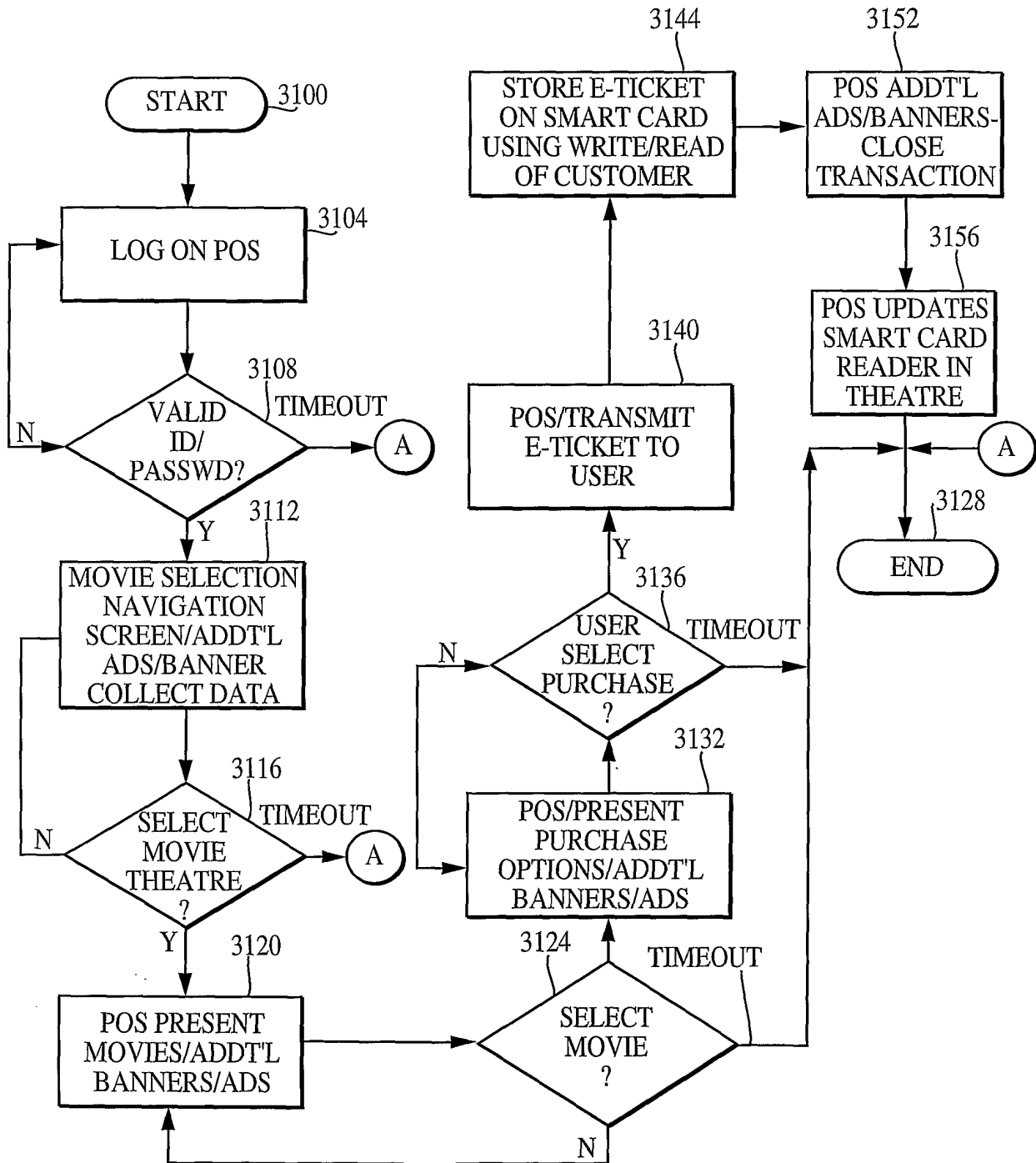


FIG. 31

34/45

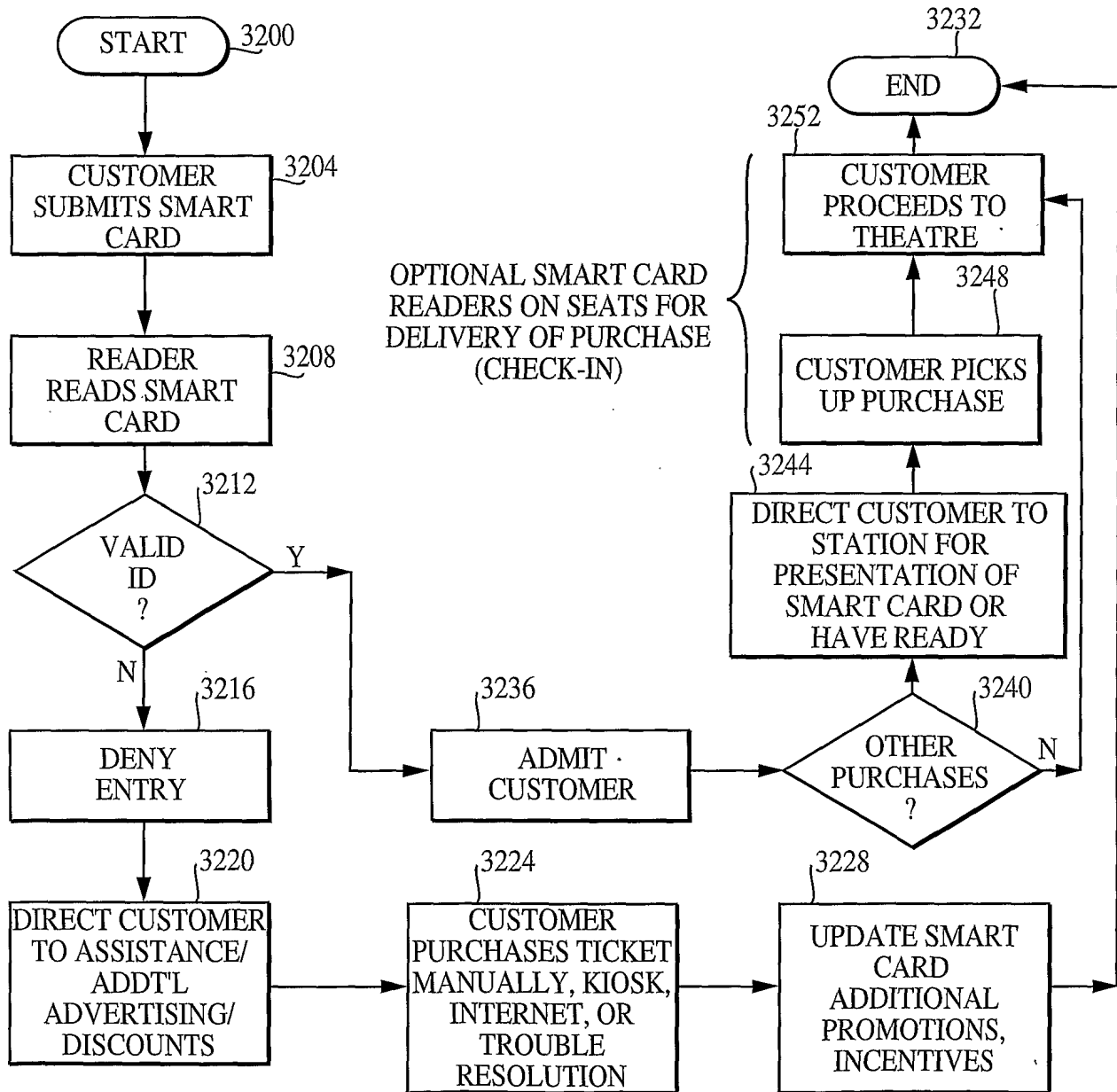


FIG. 32

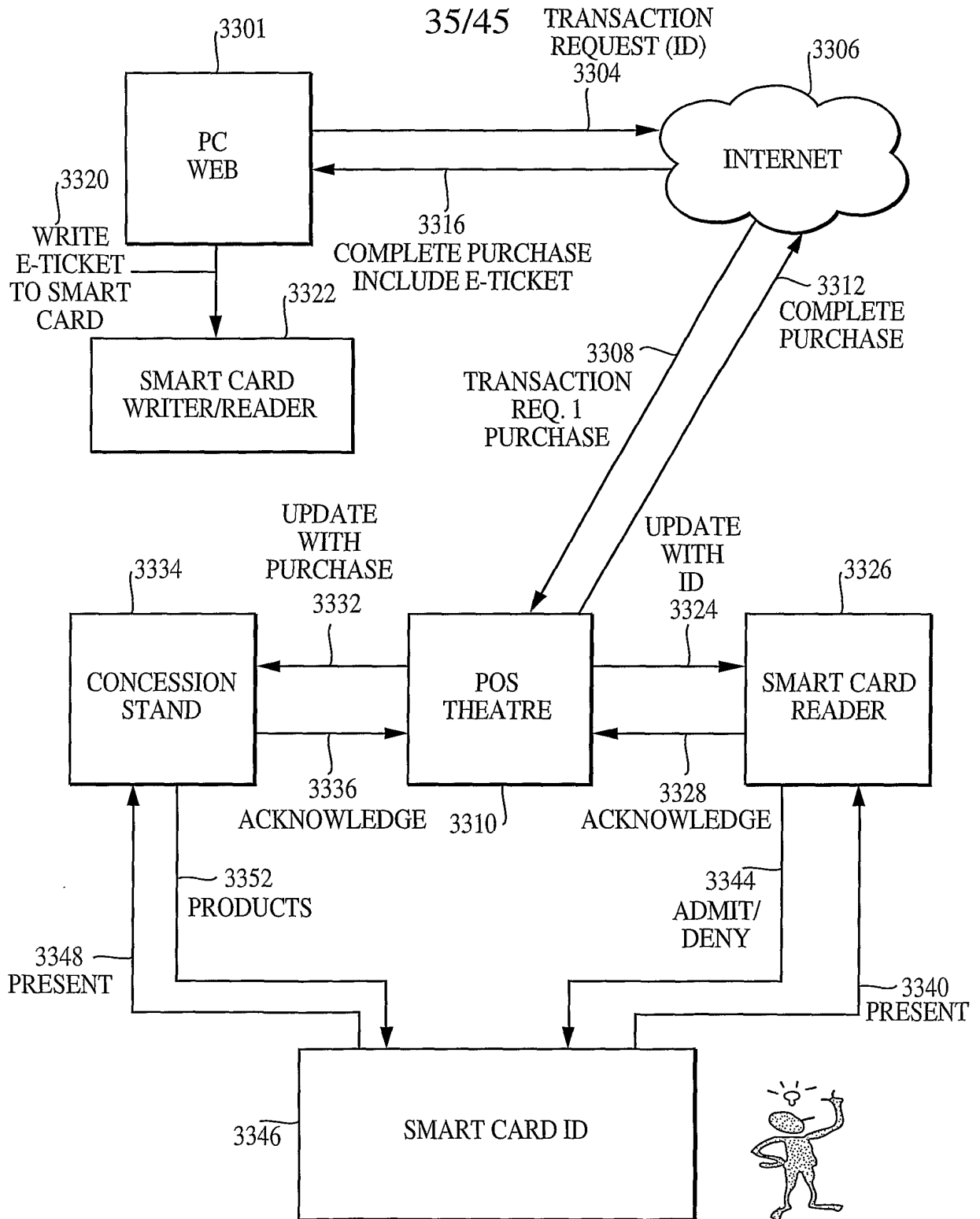


FIG. 33

36/45

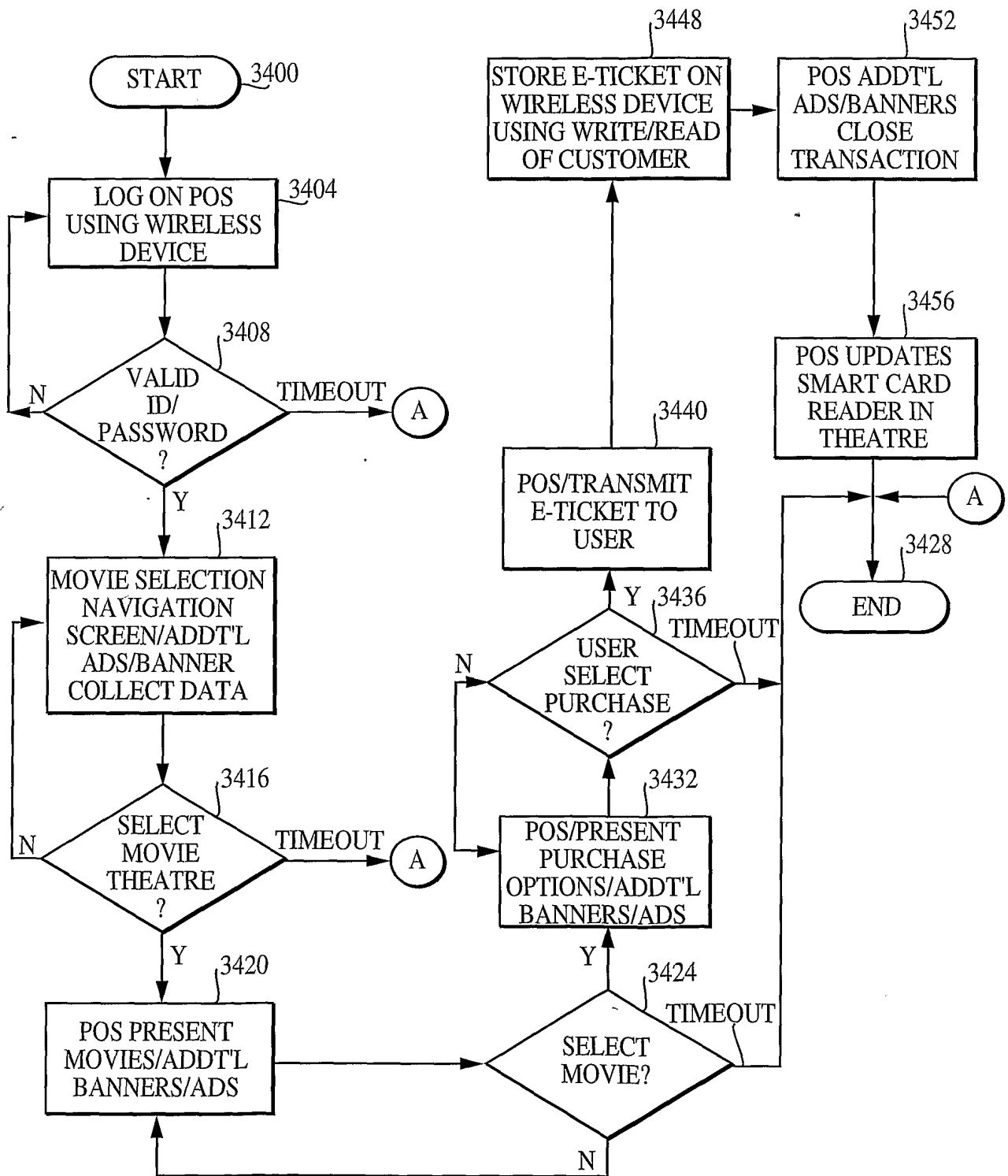


FIG. 34

37/45

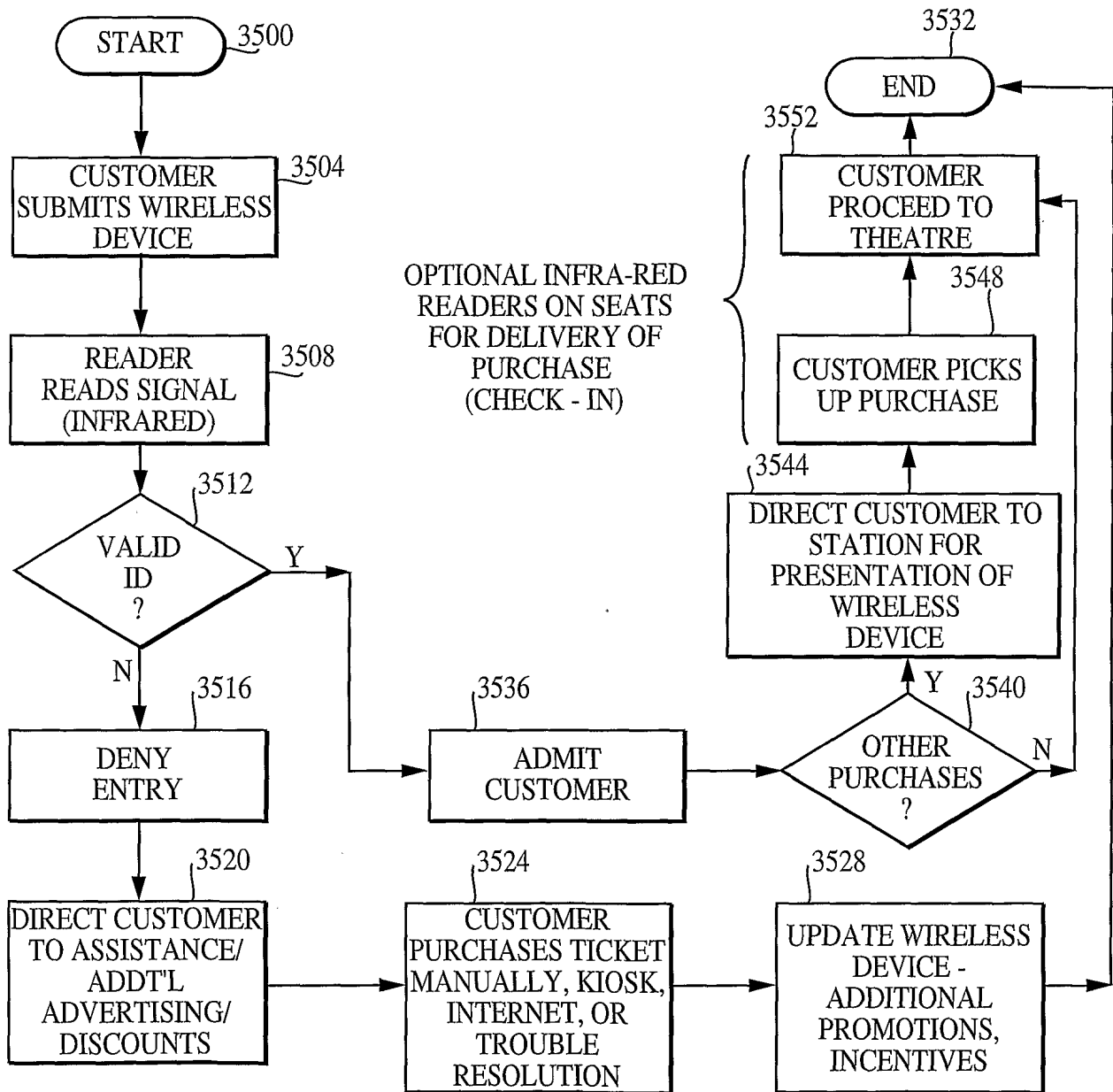


FIG. 35

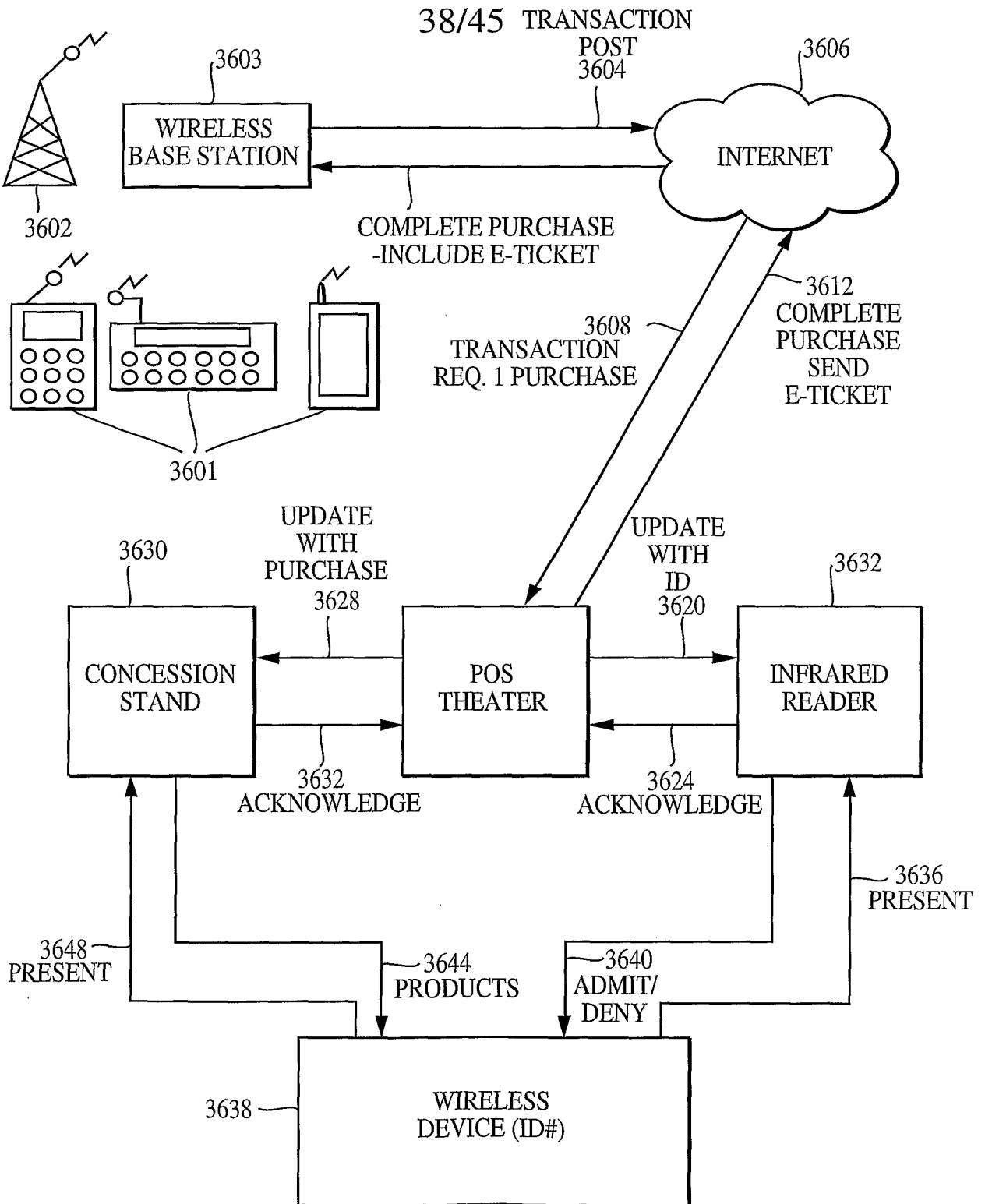


FIG. 36

39/45

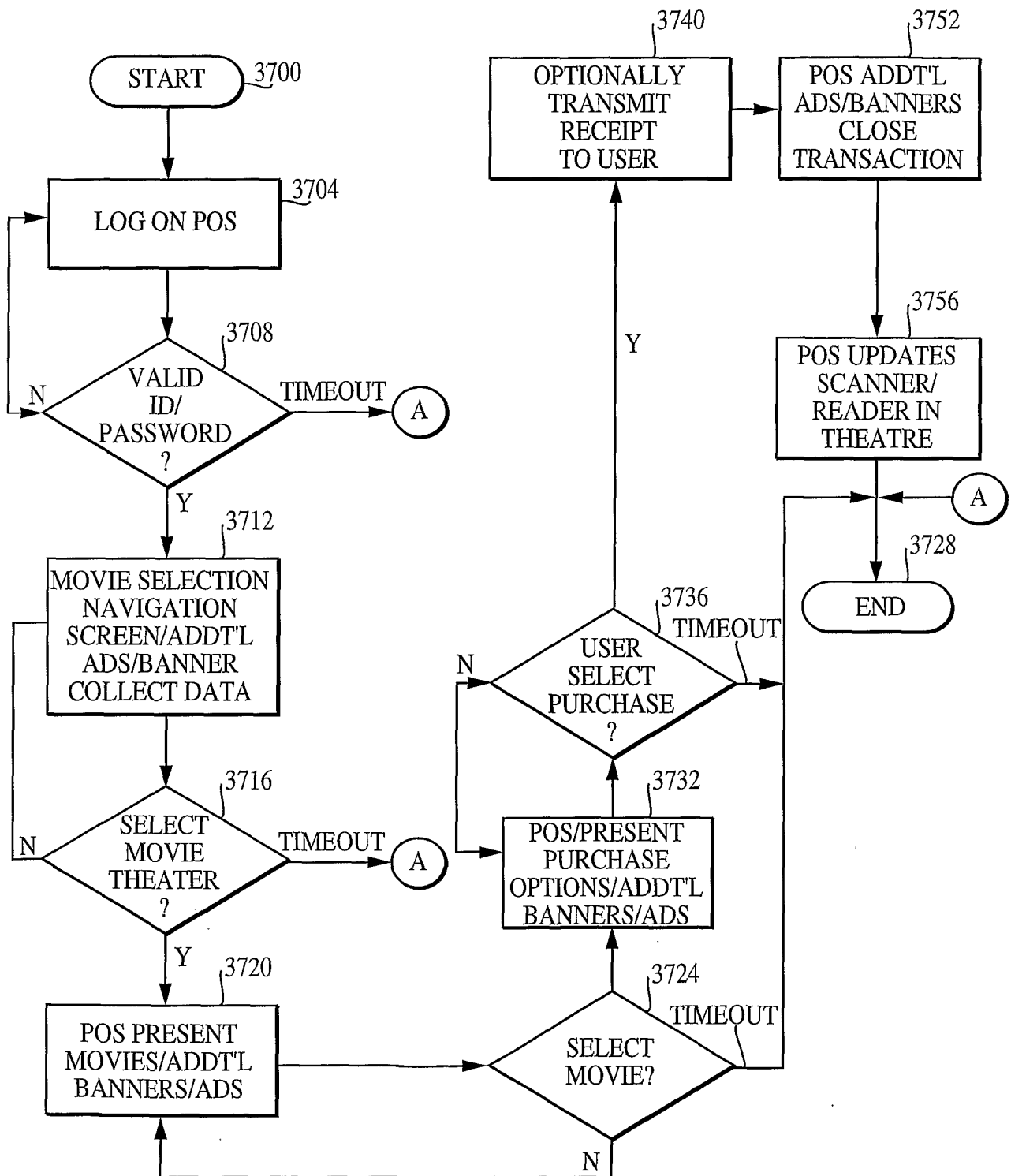


FIG. 37

40/45

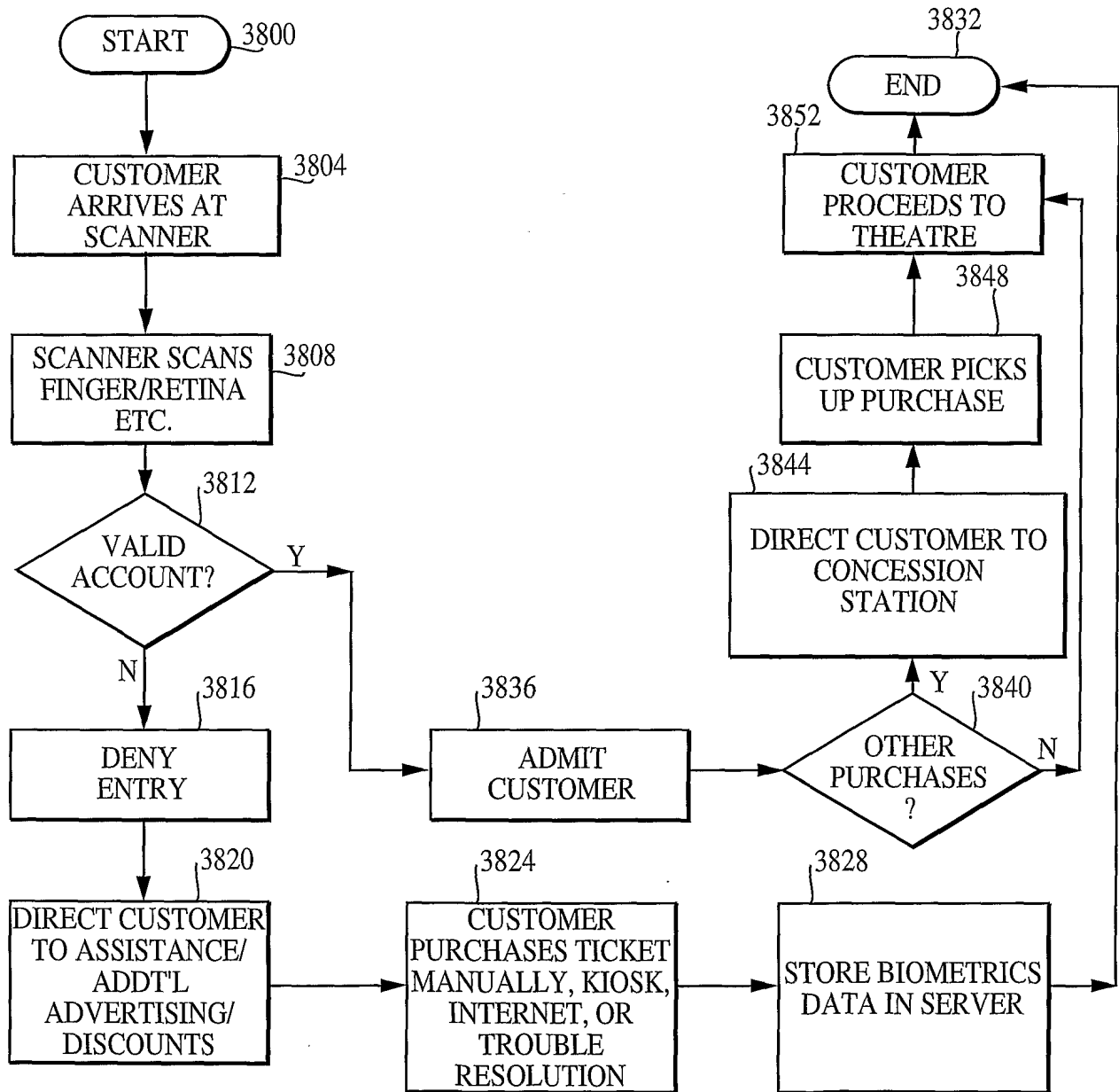


FIG. 38

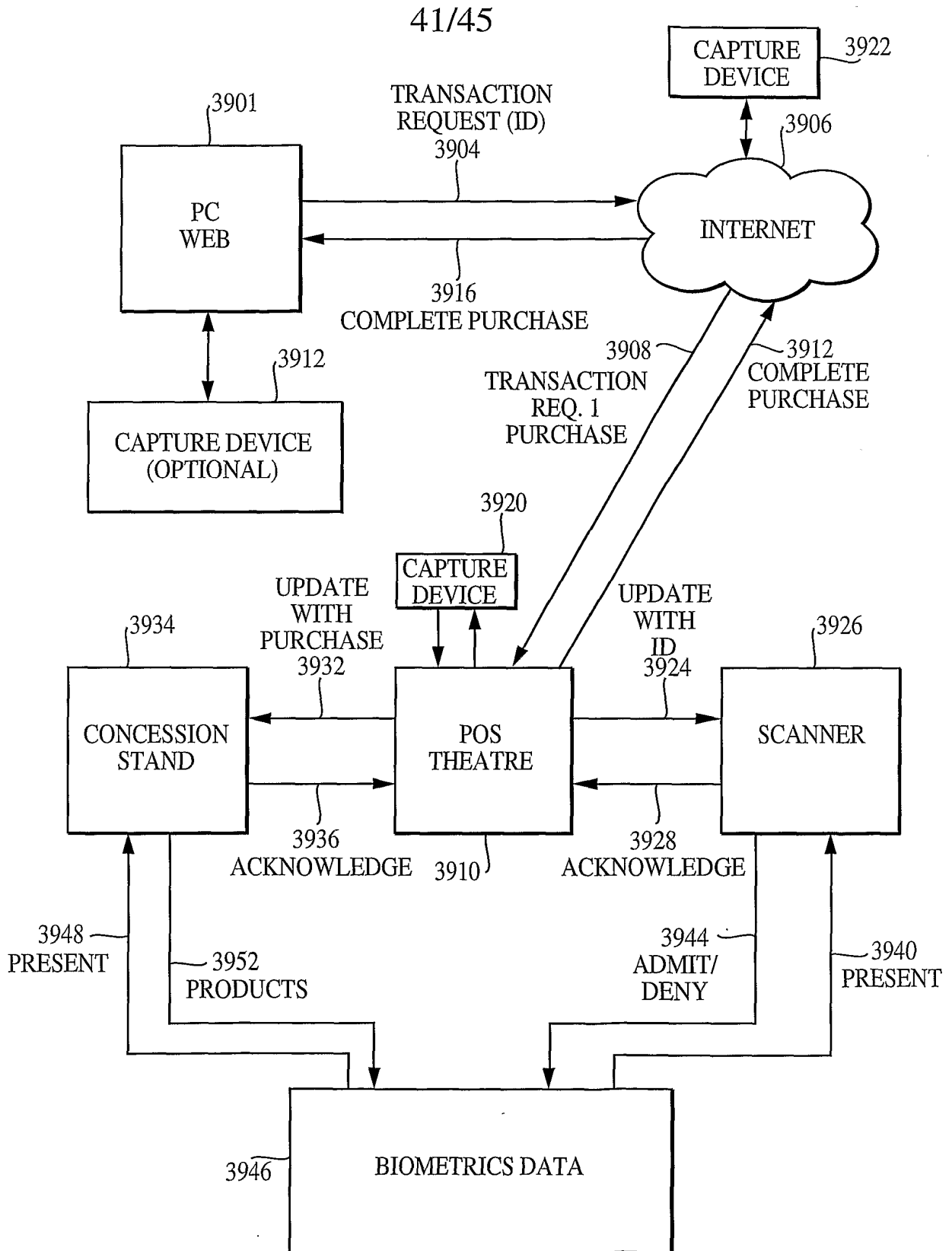


FIG. 39
SUBSTITUTE SHEET (RULE 26)

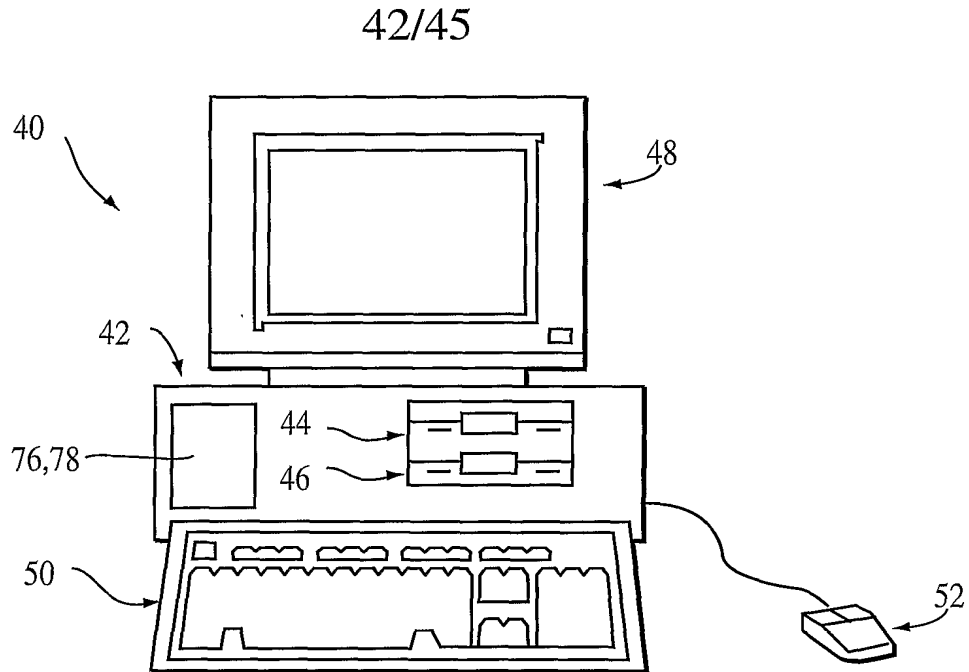


FIG. 40

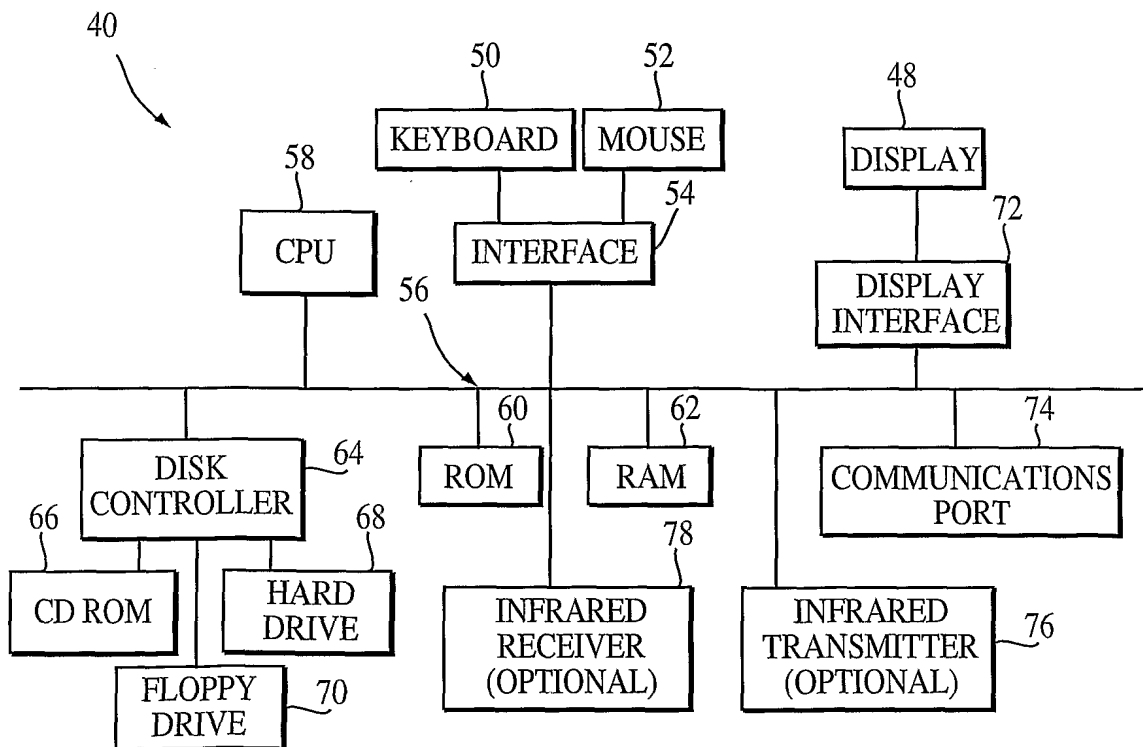


FIG. 41

SUBSTITUTE SHEET (RULE 26)

43/45

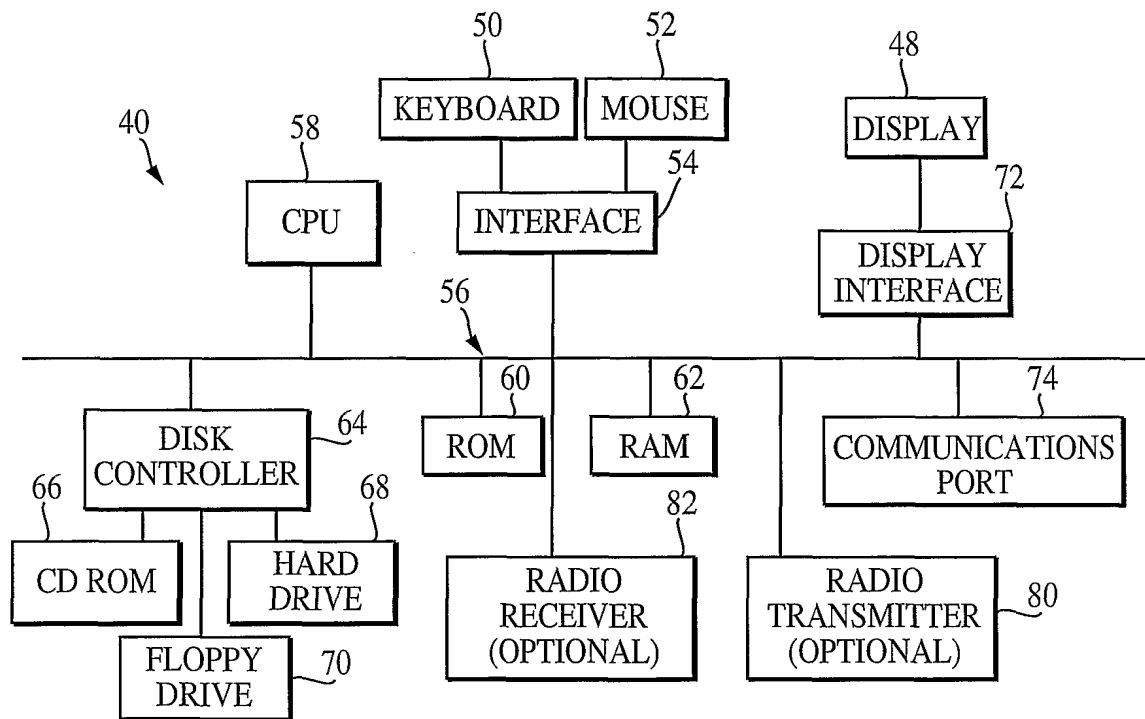


FIG. 42

44/45

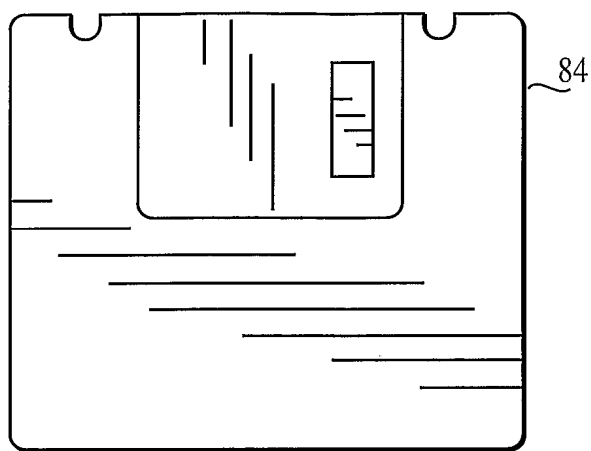


FIG. 43

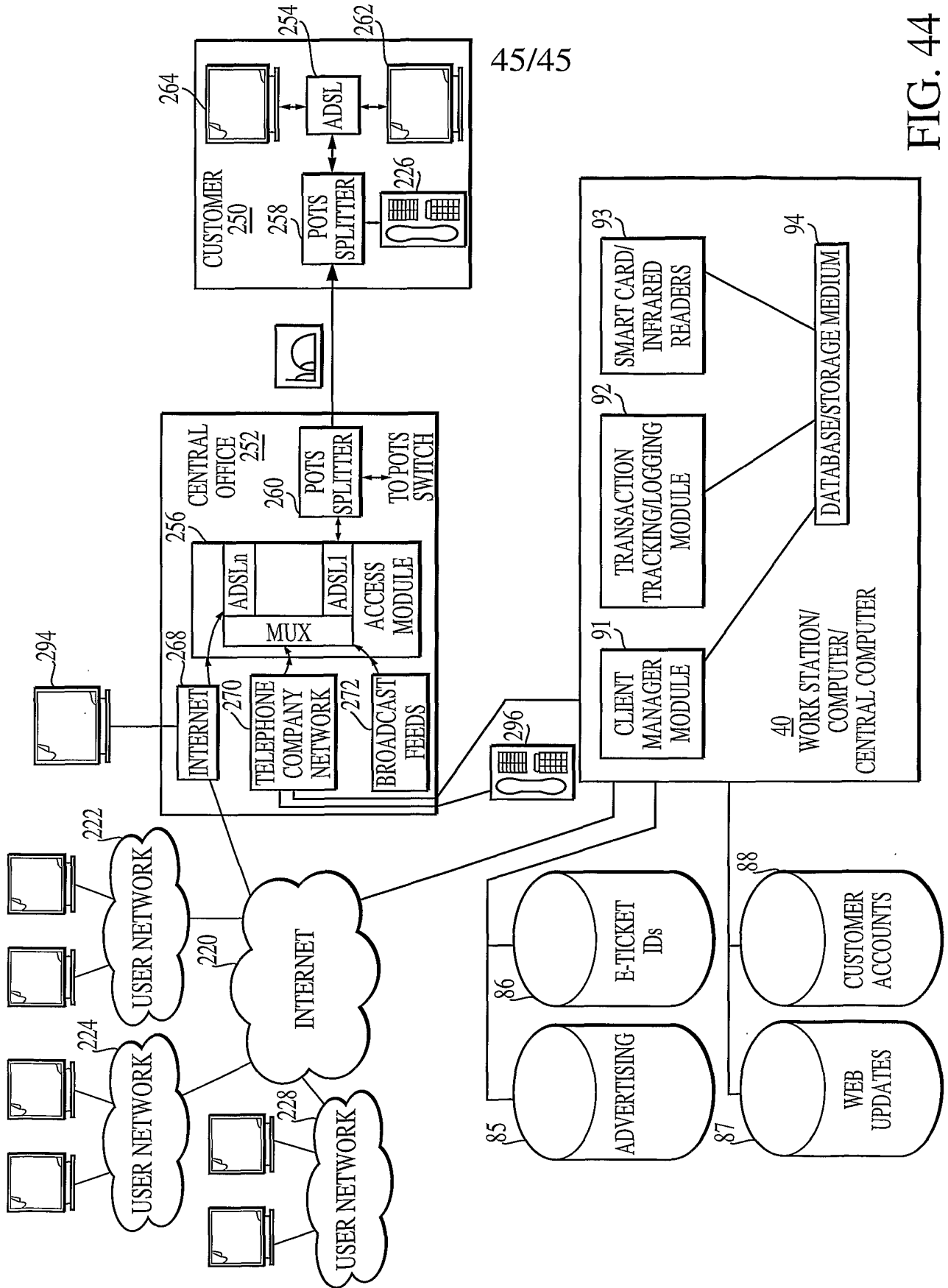


FIG. 44

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/31346

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :G06F 17/60

US CL :705/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 705/16, 17, 18, 26, 401, 410; 235/375, 381

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Please See Extra Sheet.Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Extra Sheet.**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,606,507 A (KARA) 25 February 1997, the background, and the summary of the invention.	1-109
Y	US 5,812,991 A (KARA) 22 September 1998, the background, and the summary of the invention.	1-109
Y	US 5,801,364 A (KARA ET AL.) 01 September 1998, the background, and the summary of the invention.	1-109
Y	US 5,822,739 A (KARA) 13 October 1998, the background, the abstract, and the summary of the invention.	1-109

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

12 JANUARY 2001

Date of mailing of the international search report

05 APR 2001

 Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

CUONG H. NGUYEN

Telephone No. (703) 305-4553

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/US00/31346**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,052,629 A (LEATHERMAN ET AL.) 18 April 2000, the abstract, the background, and the summary of the invention.	1-109

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/31346

B. FIELDS SEARCHED

Documentation other than minimum documentation that are included in the fields searched:

Fabozzi, The handbook of mortgage-backed securities, 4th edition, 1995, IRWIN Professional Publishing.

Maturi, Wall Street Words, 1995, McGraw-Hill.

Fitch, Dictionary of banking terms, 3rd ed. 1997, Barron's educational series, Inc.

Downes et al., Finance & Investment Handbook, 5th edition - 1998, Barron's educational series, Inc.

Woelfel, Encyclopedia of banking & finance, 10th ed., 1994, Fitzroy Dearborn Publishers.

Banking & Finance Terminology, 4th ed., 1999, American Bankers Association.

Microsoft Press, Computer Dictionary 3rd ed., 1997, Microsoft Corporation.

B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

WEST2.0/DERWENT, Dialog Classic Web, NPL (Corporate ResourceNet), WWW using Netscape browser.

search terms: initial\$, account, entertain\$, event, point of sale or POS, access\$, identi\$ device, network, online, communication, purchase, receive, storage, activate, server, provision, admit, client, customer, computer, distribute, instruction, reservation, seats, request, distribution, demographic, Internet